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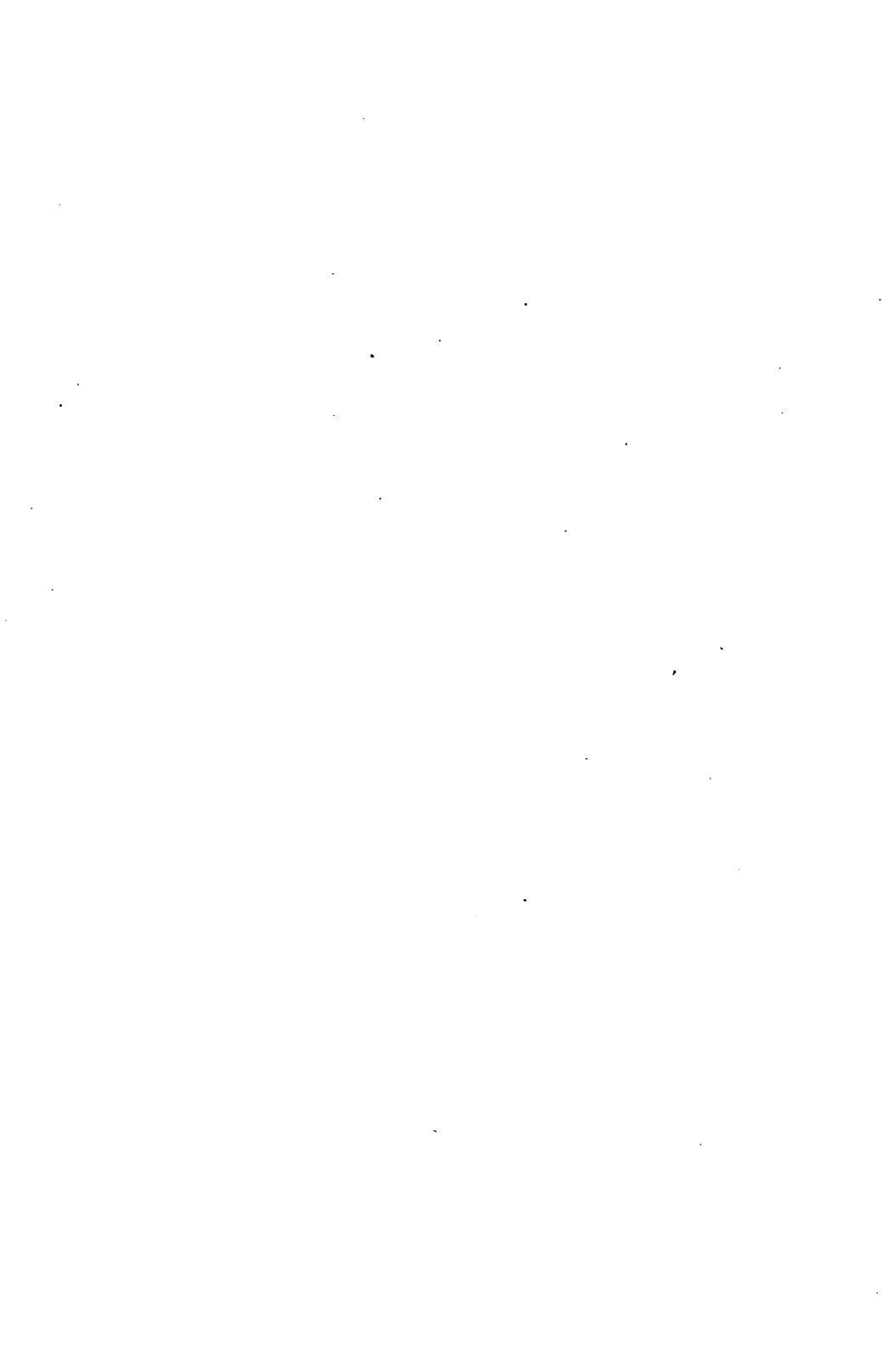
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BUREAU OF APPLIED ECONOMICS, INC.
WASHINGTON

STANDARDS OF LIVING

A Compilation of Budgetary Studies

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PREFACE.

This bulletin enlarges upon and brings up to date the summaries of budgetary studies previously published in the earlier bulletins of the Bureau of Applied Economics entitled "Cost of Living and the War" (1918) and "Standards of Living" (1919). Practically all of the important material in the earlier bulletins is reproduced and, in addition, there are added abstracts from, or digests of, the several very important studies made during the past year.

Budgetary studies have two distinct phases. The first is the determination of the standards and quantities of things necessary to maintain a family at a certain level of living. The second is to ascertain the cost of the items arrived at as necessary for the purpose mentioned. The determination of the quantity budget is the more important and also the more difficult. The pricing of the quantity budget is a mere mechanical matter, involving nothing more than careful field work.

The ultimate interest, however, lies in the cost of the budget. For the practical value of such studies is to ascertain in what degree a particular group of people are attaining the living standards set up, and this is measured most readily in terms of dollars and cents. On the other hand, it must always be remembered that the cost of a budget is a changing thing, fluctuating with the changes in prices, and that the tests of sufficiency or insufficiency are the items themselves, not their cost.

Budgetary studies of the character referred to had their scientific beginning in this country with Chapin's "The Standard of Living in New York City" (1907) and More's "Wage-Earners' Budgets" (1907). These were followed by other careful investigations, such as those of the New York State Factory Investigation Commission and the Bureau of Personal Service of the Board of Estimate and Apportionment of New York City in 1915.

Recently the growing interest in the subject of a living wage has stimulated a series of studies which, because they had the work of earlier students and investigators to build upon, are more comprehensive and more accurate than the pioneer studies could be. The subject is not yet upon a plane of absolute scientific precision, but the results of the recently published investigations, particularly those of the United States Bureau of Labor Statistics, the National Industrial Conference Board and the Philadelphia Bureau of Municipal Research, offer material of very great value for a final solution of the problem.

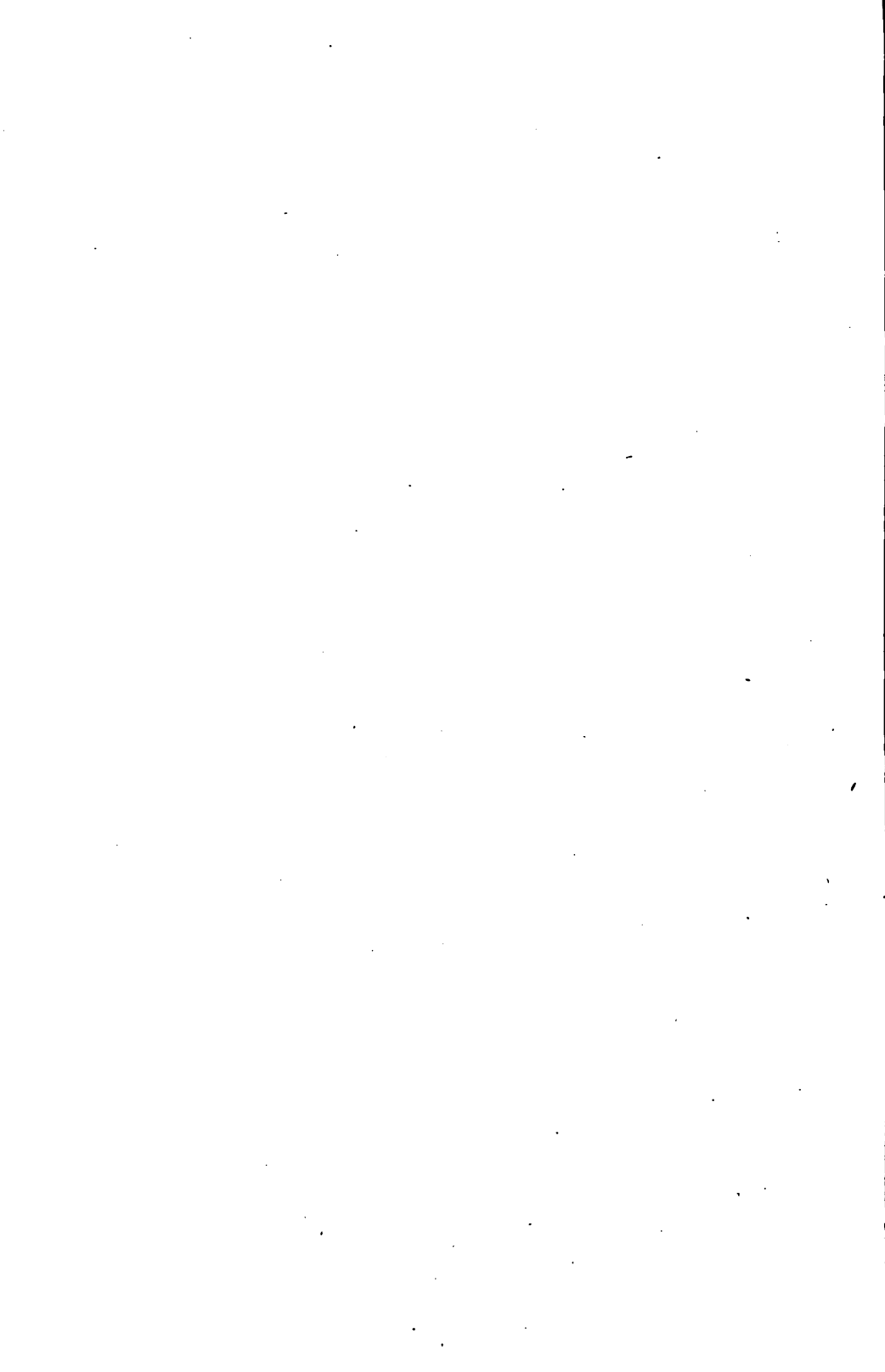
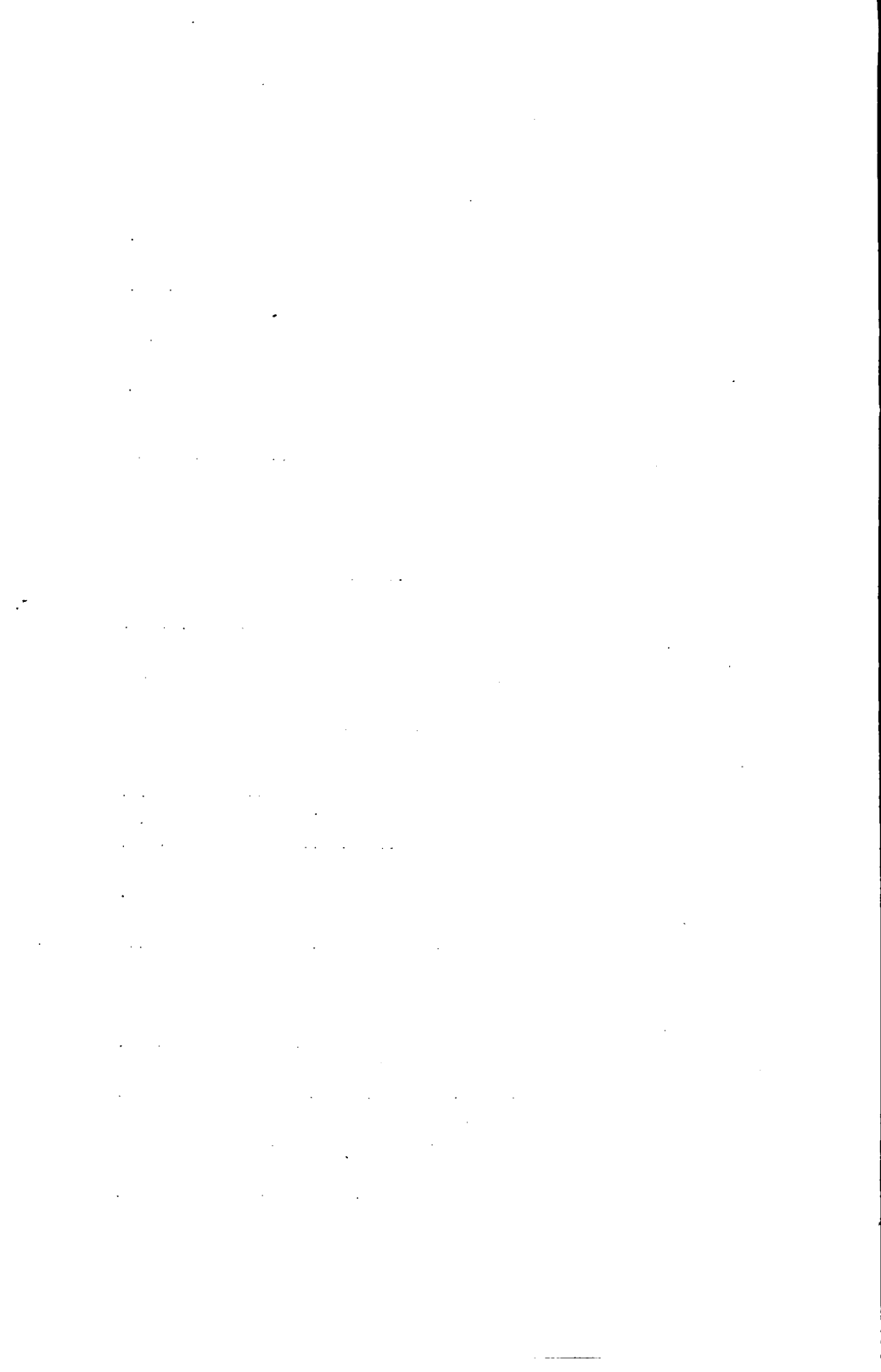


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I.

MINIMUM QUANTITY BUDGET NECESSARY TO MAINTAIN A WORKER'S FAMILY OF FIVE IN HEALTH AND DECENCY.

U. S. Bureau of Labor Statistics, 1920.

This budget constitutes a revision of the "Tentative Budget" for Washington, D. C., summarized in the next section. The revision was made in the light of the comments and suggestions evoked by the tentative study, supplemented by further investigations of the Bureau, and by the findings of a subcommittee of the National Conference on Social Work, and with reference primarily to the industrial worker.

A quantity budget has been adopted in this study since quantitative measurements furnish the only fixed standard applicable to all localities. Because of variations in prices the cost budget cannot be used generally. Of course, some items in the family budget cannot be expressed quantitatively, but the majority of them may be. A quantity budget similar to the one herewith presented has recently been priced in the District of Columbia; and it was found that almost 85 per cent of the total cost was made up of items for which a definite quantity had been expressed.

A family of five—husband, wife and three children below the age of 15—has been chosen because it conforms very closely to the average American family. The average number in the families included in the cost-of-living study made by the Bureau of Labor Statistics in 1918-19 was 4.9 persons, or 3.33 equivalent adult males. The standard family of five (husband, wife, girl aged 6, boy aged 12, boy aged 2), totaling 3.35 equivalent adult males, thus corresponds very closely to the "average" or "typical" American family.

Food.

In the determination of a proper family dietary there are two standards which must be assumed at the beginning: (1) A standard food requirement in calories per man per day; (2) a standard table giving the food-consuming capacity of women and children in terms of a common unit—the equivalent adult male.

It has been estimated that the number of calories needed by a man at moderately hard muscular work is 3,000 to 3,200 per day. About 10 per cent of the calorie value of food is wasted in preparation,

cooking, etc., and also a small per cent of the food which enters the mouth is not digested or assimilated. Therefore, 3,500 calories purchased represents approximately 3,000 to 3,200 calories actually consumed. Experience indicates that it is necessary to purchase this amount of food per man per day in order to insure sufficient variety and quantity, both as to bulk and calorie content. If the housewife is a dietetic genius, 3,500 calories per man per day purchased in the market may be a liberal allowance.

The relative proportions of the food consumed by the husband, wife and children have been determined approximately by laboratory experiments and by estimates taking into account the factors of age, sex, weight, occupation and activity. A scale showing relative amounts of food consumed by men and women at different kinds of work, such as hard muscular work, moderately active muscular work, light muscular work and sedentary occupations, and by children of different sexes and ages, is available and could have been used in this instance, but for the increased amount of labor which it would have entailed. In studies of such large scope as a country-wide cost-of-living survey, brevity is essential and the following abridged table of equivalent adult males has been found more practical and sufficiently accurate for general purposes, and it has, therefore, been adopted for use by the Bureau of Labor Statistics:

Male, 15 years or over.....	1.00
Female, 15 years or over.....	.90
Children, 11 to 14 years, inclusive.....	.90
Children, 7 to 10 years, inclusive.....	.75
Children, 4 to 6 years, inclusive.....	.40
Children, under 4 years.....	.15

The following food budget has been drawn up for a family of five, including husband, wife and three children—boy, aged 12; girl, 6, and boy, 2. According to the above standard, the calorie requirements of a man is taken as 1; that of a woman as 0.9; a boy of 12 years, 0.9; a girl of 6 years, 0.4, and a boy of 2 years, 0.15. The combined food requirements of this family would be equal to that of 3.35 adult males.

The quantity food budget submitted here as representing the food requirements of the standard family of five was obtained by averaging the actual amounts of foods used by 280 families selected from the cost-of-living survey made by the Bureau of Labor Statistics. The families were selected for special food analysis because they averaged in size approximately 3.35 equivalent adult males, and in

the neighborhood of 3,500 calories of food purchased per man per day. The food budgets in the Bureau's study were taken in great detail, giving, among other things, the amount of each article of food purchased for a year for each family scheduled. The 280 budgets used in this detailed calorie analysis represented about 25 cases from each of 11 representative cities.

The average food budget obtained from these 280 families was then carefully considered from the standpoint of health. For the most part, this average budget contains proteins, fats and carbohydrates in sufficient quantities and in the right proportions. To make the average food budget acceptable to trained dietitians as a standard food budget, intended to maintain the standard family in health, it was necessary only to reduce slightly the quantity of meat and to increase slightly the quantities of whole milk, fresh vegetables and fruits.

Quantity of Food for a Family of Five.

The proposed standard food budget submitted herewith, therefore, includes the kinds and, in a large degree, the quantities of food actually consumed by actual workingmen's families. The proposed standard budget has not been worked out by theoretical "experts" in the secrecy of the laboratory. It is made up of things which real people eat day by day throughout the year. It must not be hastily inferred that no improvement can be suggested in the workingman's diet because these workingmen's families ate sufficient food or about the proper kind. Only those families were included in the special food analysis whose diets measured up to the calorie requirements of sound dietetics. Had the food budgets of all families been averaged together, the showing would have been quite different.

Following is the budget showing yearly quantities in pounds:

**ANNUAL QUANTITY OF FOOD FOR A FAMILY OF FIVE, INCLUDING
HUSBAND, WIFE AND THREE CHILDREN BOY AGED 12, GIRL 6, AND
BOY 2).**

Item.	Pounds.	Item.	Pounds.
Meat:		Sugars:	
Beef, fresh, steak.....	75	Sugar.....	163
roast.....	63	Corn sirup.....	} 36
stew.....	47	Molasses.....	
Beef, salt, corned.....	10	Honey.....	
dried.....	1	Candy.....	10
Veal, fresh, cutlet.....	} 13	Fresh fruits:	
roast.....		Apples.....	219
stew.....	} 30	Peaches.....	28
Pork, fresh, chops.....		Bananas.....	54
roast.....	19	Lemons.....	10
salt, bacon.....	18	Oranges.....	100
ham and shoulder.....	7	Grapes.....	14
side, dry.....	2	Berries.....	51
pickled.....	} 26	Cantaloupe.....	10
Mutton, chops.....		Watermelon.....	15
roast.....	23	Pears and others.....	36
stew.....	16	Grapefruit.....	32
Poultry, hens.....	10	Fruits, dried:	
Sausage.....	8	Prunes.....	24
Liver.....	} 10	Raisins, currants.....	11
Cooked meat, ham.....		Fruits, canned:	
boiogna.....	} 10	Peaches.....	23
corned beef.....		Pineapple.....	2
Fish:		Berries.....	22
Fish, fresh.....	41	Jelly.....	} 10
salt.....	5	Fruit butters.....	
canned salmon.....	10	Vegetables, fresh:	
canned tuna.....	2	Potatoes, white.....	738
Oysters.....	5	sweet.....	48
Crabs.....	} 6	Cabbage.....	82
Clams.....		Spinach, kale & other greens.....	78
Dairy products:		Peas.....	11
Milk, whole.....	1,602	Beans, string.....	37
condensed, evaporated.....	65	Tomatoes.....	130
Cream.....	3	Onions.....	74
Ice Cream.....	8	Corn.....	36
Butter.....	80	Lettuce.....	10
Cheese, American.....	14	Celery.....	7
cottage.....	6	Beets.....	24
Fats, mixed fats, vegetable oil		Carrots.....	52
etc.:		Turnips.....	40
Lard.....	37	Cauliflower.....	} 27
Crisco.....	7	Parsnips.....	
Lard, compound.....	13	Peppers.....	
Oleo.....	13	Asparagus.....	
Nut margarine.....	4	Cucumbers.....	} 15
Cottonseed oil.....	} 7	Radishes.....	
Mazola, etc.....		Vegetables, dried:	
Eggs.....	102	Beans, navy.....	24
Cereals and their products:		Peas.....	5
Flour, wheat.....	332	Beans, lima.....	15
rye.....	12		

Item.	Pounds.	Item.	Pounds.
Graham	46	Vegetables, canned:	
Cornmeal	25	Beans, baked	5
Hominy or grits	12	Peas	10
Cream of Wheat	7	Corn	19
Corn flakes	4	Tomatoes	25
Rolled oats	58	Soup	5
Bread, wheat	457	Miscellaneous	
rye	22	Chocolate	1
Graham	2	Peanut butter	5
Rolls	22	Cocoa	5
Crackers	18	Cornstarch	4
Cake	15	Tapioca	2
Pies	4	Tea	10
Macaroni	33	Coffee	40
Spaghetti		Gelatin	1
Noodles		Ice	¹ 2,800
Rice	44		

¹25 Pounds daily for four months.

Bureau of Labor Statistics and Department of Agriculture Budgets Compared.

The Department of Agriculture has prepared a quantitative estimate of weekly food supply for an average family, consisting of husband, wife and three children under 14, whose ages total not less than 20 nor more than 24 years. The family on which the estimate is based is slightly larger in equivalent adult males than the family used in the food budget of the Bureau of Labor Statistics, and thus the amounts of food are somewhat higher than the requirements of a family of 3.35 equivalent adult males. Further than this, the nutrition experts of the Department of Agriculture recognize that the amounts of fresh fruits and vegetables in its budget are possibly higher than is absolutely necessary for health. For this reason a considerable difference in the two budgets exists in this food group. In all other classes of food the two budgets do not vary materially.

The following is a comparison of the Bureau of Labor Statistics food budget with the dietary standards established by the Department of Agriculture.

**COMPARISON OF BUREAU OF LABOR STATISTICS AND DEPARTMENT
OF AGRICULTURE BUDGETS, SHOWING WEEKLY QUANTITIES OF
FOOD EXPRESSED IN POUNDS OF FRESH WEIGHT.**

Article.	Bureau of Labor Statistics.	Depart- ment of Agriculture.
Vegetables:	Pounds.	Pounds.
Fresh, starchy	15.1	()
leafy	3.4	()
other	8.3	()
Canned	1.2	()
Dried (fresh weight ²)	5.1	()
Fruits:		
Fresh	10.9	()
Canned . . . . .	.9	()
Dried (fresh weight ³)	4.0	()
Total, vegetables and fruits	48.9	70.0
Milk (14 quarts)	30.8	30.8
Meats (except bacon and salt pork), fish, poultry, cheese, eggs, etc.	11.8	10.5
Cereals and their products (flour, meal, rice, breakfast foods, macaroni, bread,⁴ crackers, etc.)	19.0	16.0
Sweets (sugar, molasses,⁴ sirup,⁴ etc.)	3.9	4.5
Fat (butter, oil, lard, bacon,⁵ salt pork,⁵ cream, etc.)⁵	3.7	4.0
Total (exclusive of tea, coffee and condiments)	118.1	135.8

¹ Vegetables and fruits are not subdivided in the Department of Agriculture's budget.

² Six times dried weight equals fresh weight.

³ One pound of bread equals three-fourths pounds of flour.

⁴ One pound of molasses, sirup or candy equals three-fourths pound of sugar.

⁵ One pound of bacon or salt pork equals three-fourths pound of butter, and one pound of cream equals one-fourth pound of butter.

The Department of Agriculture employs fresh and equivalent weights in its estimate. One pound of dried fruit and vegetables is counted as six pounds of fresh, and the weight of cereals, sweets and fats is converted to equivalent pounds of flour, sugar and butter, respectively. For the purpose of comparison, the Bureau of Labor Statistics budget has been computed by approximately the same method.

Variety of Foods Available in Different Seasons.

The food budget, however, in either of the forms in which it has been presented, does not offer to the social worker, or to the housewife, a practical guide in the purchasing of a health-producing

dietary. In order to assist in buying, or to serve as a check against quantities ordinarily purchased, the weekly quantities of the actual articles of food embraced in the budget have been segregated into (1) year-round foods, (2) special summer foods and (3) those which will probably be used during the winter season when the price of fresh fruits and vegetables prohibits their purchase.

The budget as a whole consists of 5,961 pounds of food (dry weight) per year, or approximately 115 pounds per week, for the family. About 100 pounds per week are articles of food of a more or less staple character which may be purchased at any season of the year. These foods have been placed in the year-round group, leaving 15 pounds of food per week to be made up from the seasonal groups. The foods which are abundant only in the summer season make up a weekly average of 7.6 pounds; those which are available in the winter season, 6.1 pounds. These averages, however, are on the basis of 52 weeks, and to ascertain the quantity per week of the season (approximately 26 weeks) in which they are to be used, it will be necessary practically to double the listed quantities of winter and summer-season foods. Following is the list of year-round, winter-season and summer-season foods, showing the average weekly quantity of each allowed in the budget.

**AVERAGE WEEKLY QUANTITIES OF YEAR-ROUND, WINTER-SEASON,
AND SUMMER-SEASON FOODS CONTAINED IN BUDGET.**

Year-round Foods.

Article.	Pounds.	Article.	Pounds.
Meat and fish.....	8.5	Sugar	3.1
Eggs	¹ 2.0	Corn sirup, molasses & honey.	.7
Milk, whole	² 30.8	Apples	4.2
Condensed and evaporated milk.	1.2	Oranges	1.9
Cheese . . . . .	.4	Bananas	1.0
Butter (including oleo and nut margarine	1.8	Potatoes	14.2
Lard, Crisco and compounds....	1.0	Sweet potatoes . . . . .	.9
Flour	7.5	Cabbage	1.6
Cornmeal . . . . .	.5	Spinach, kale and other greens	1.5
Rice . . . . .	.8	Onions	1.4
Bread and rolls.....	9.6	Coffee . . . . .	.8
Breakfast foods	1.3	Tea . . . . .	.2
Cakes and pies . . . . .	.4	Miscellaneous	2.0
Crackers . . . . .	.3		
Macaroni, spaghetti . . . . .	.6	Total.....	100.2

**AVERAGE WEEKLY QUANTITIES OF YEAR-ROUND, WINTER-SEASON,
AND SUMMER-SEASON FOODS CONTAINED IN BUDGET—Concluded.**

Winter-season Foods.³

Grapefruit	0.6	Navy beans	0.5
Prunes . . . . .	.5	Lima beans . . . . .	.3
Canned peaches . . . . .	.4	Canned peas . . . . .	.2
Canned berries . . . . .	.4	Canned corn . . . . .	.4
Carrots	1.0	Canned tomatoes . . . . .	.5
Turnips . . . . .	.8		
Beets . . . . .	.5	Total	6.1

¹ 1.33 dozen.

² 14 quarts.

³ Quantities to be doubled during the winter season, November to April, inclusive.

Summer-season Foods.⁴

Article.	Pounds.	Article.	Pounds.
Peaches	0.5	Tomatoes	2.5
Grapes . . . . .	.3	Corn . . . . .	.7
Berries	1.0	Lettuce . . . . .	.2
Watermelon . . . . .	.3	Miscellaneous vegetables . . . . .	.5
Miscellaneous fruits . . . . .	.7		
Peas . . . . .	.2	Total	7.6
Beans, string . . . . .	.7		

⁴ Quantities to be doubled during the summer season, May to October, inclusive.

In listing these foods and the average weekly quantities, it is not the intention to recommend that the housewife who buys food for a family of five should attempt to secure either these exact foods or the specified quantities. The articles and quantities will necessarily have to be treated with a large degree of elasticity. In the year-round foods, it will, of course, be advisable to vary the amounts according to the season, using more fats and carbohydrates during the winter and less during the summer when heat-producing foods are not so much required. Especially will this be true of fat meats, cornmeal, macaroni, rice, beans, etc. On the other hand, eggs, apples, cabbage, spinach, kale, etc., although available throughout the year, will probably be used in greater quantities in summer than in winter.

On account of variations in the length of seasons in different sections of the country, as well as the overlapping of foods from one season to the other, a general grouping of seasonal foods is extremely

difficult. Grapefruit, for instance, while primarily a winter fruit, may be secured in some of the months usually classed in the summer season. Many families also make it a practice to use navy and dried lima beans and canned fruits and vegetables in the summer as well as in the winter season.

The list will prove valuable only as a guide in suggesting the variety of foods available during the different seasons of the year and indicating something of the relative proportions in which they may be purchased in order to furnish a family of five with a dietary which will promote health.

CLOTHING.

The level of health and decency in clothing has been interpreted as a level which not only takes into account the physical needs of warmth, cleanliness and comfort, but also has such regard for appearance and style as will permit the family members to appear in public, and within their necessarily rather narrow social circle with neatness and self-respect. In other words, the clothing standards of the family should provide a fair degree of that mental satisfaction which follows being reasonably well dressed. But, while admitting the desirability of this more generous wardrobe, an effort has been made to allow only those quantities of clothing consistent with the *minimum* requirement for health and decency, and, where a doubt has existed, to err on the side of conservatism.

The clothing budget herewith presented has at its basis the clothing budgets of approximately 850 families having three children under 15 years of age, which were included in the survey of the Bureau of Labor Statistics in 1918-19. This basic material was first modified as the result of a large number of interviews with families in Washington, D. C. The material was then published in tentative form (*Monthly Labor Review*, December, 1919, pp. 22-29) as applying to the family of a clerical worker in Washington. Criticisms and suggestions from clothing experts all over the country have been received, and that budget has been made over into the manual worker's family clothing budget here submitted. The clothing budget, like the food budget, is made up of articles actually worn by real workers and their families. The modifications made in the average clothing budget of the families studied in order to arrive at a standard clothing budget are much more extensive than in the case of the food budget. The articles of clothing are the same in both the actual average budget and the proposed standard budget, but

the quality of material and the yearly replacement in the latter have been determined very largely by special study.

The quantities listed in the clothing budget are the *annual replacements*, not the number of garments possessed at any one time. For example, in the husband's clothing budget the annual replacement of a summer suit is given as one-third, which means that one summer suit is expected to last three years. Allowance is made for the purchase of two winter union suits each year, but this does not mean that the worker possesses only two sets of winter underwear. He may have six sets or any other number, but with reasonable care he can manage comfortably by purchasing two suits a year.

In preparing this quantity budget, a considerable amount of sewing at home has been assumed as possible, and has been indicated accordingly. When more than the specified amount is done, a saving may be effected, or the family clothed more abundantly. On the other hand, where little or no home sewing can be done, the number of garments allowed will be barely sufficient to maintain decency. The investigations of the Bureau of Labor Statistics show that during the war clothing purchases of the average worker's family were considerably curtailed. When it is necessary to economize, the expense for clothes may be greatly reduced for a season or two, but the result of allowing the whole clothing budget to become depleted creates a serious situation in family expenditures.

In order to make the yearly clothing budgets more serviceable as a guide in buying, the annual replacements for each member of the family have been divided into year-round, summer and winter clothing.

In basing the quantities of clothing on what has been considered reasonable length of wear, it has been necessary to assume that clothing purchased in conformity with this budget will be of good average quality.

Clothing Budget of a Family of Five.

The clothing budgets of the husband, wife and three children are given below :

ANNUAL QUANTITY OF CLOTHING FOR A FAMILY OF FIVE, INCLUDING HUSBAND, WIFE AND THREE CHILDREN (BOY AGED 2, GIRL 6 AND BOY 12).

Husband.			
Article.	Replace- ment per year.	Article.	Replace- ment per year.
Summer Clothing.		Year-round Clothing—Con.	
Hats, straw	1	Socks cotton	12
Union suits	3	Shoes:	
Suits	$\frac{1}{2}$	Dress	$\frac{1}{2}$
Winter Clothing.		Work	2
Hats, felt	$\frac{1}{2}$	Shoe repairing:	
Overcoats	$\frac{1}{4}$	Whole soles	1
Sweaters	$\frac{1}{2}$	Half soles and heels	1
Union suits	2	Rubbers	$\frac{1}{2}$
Suits	$\frac{1}{2}$	Gloves:	
Gloves, leather, street	1	Cotton, work	6
Year-round Clothing.		Collars	6
Caps	1	Ties	2
Work trousers (or overalls)	2	Handkerchiefs (cotton)	8
Shirts:		Garters	2
Dress	1	Belts	$\frac{1}{2}$
Work	5	Suspenders	1
Nightshirts	2	Umbrellas	$\frac{1}{2}$
		Cleaning and pressing (suit)	1
		Miscellaneous	(1)

¹ Lump sum of money equal to about 7 per cent of total cost of husband's clothes.

Wife.

Article.	Replace- ment per year.	Article.	Replace- ment per year.
Summer Clothing.		Year-round Clothing.	
Hats	1	House dresses	2
Skirts, cotton, wash	$\frac{1}{2}$	Aprons, kitchen (to be made at home)	1
Waists, cotton (to be made at home)	3	Corsets	2
Waist, dress	$\frac{1}{2}$	Corset covers	2
Dresses, cotton, thin (to be made at home)	2	Combinations, muslin	2
Union suits	2	Brassieres	2
Petticoat, muslin	1	Nightgowns, muslin	2
Shoes, low	1	Kimonos	$\frac{1}{2}$
Gloves, cotton	1	Stockings (cotton)	8
Winter Clothing.		Shoe repairing:	
Hats	$\frac{1}{2}$	New heels	3
Suits, wool	$\frac{1}{2}$	Half soles and heels	1
Dresses, wool	$\frac{1}{2}$	Handkerchiefs (cotton)	8
Coats, wool	$\frac{1}{2}$	Umbrellas	$\frac{1}{2}$
Petticoats (Venetian cloth or saten)	1	Rubbers	1
Union suits	1	Cleaning and pressing (suit)	1
Shoes, high	1	Miscellaneous	(1)
Gloves (not kid)	$\frac{1}{2}$		

² Lump sum of money equal to about 8.5 per cent of total cost of wife's clothing.

**ANNUAL QUANTITY OF CLOTHING FOR A FAMILY OF FIVE, INCLUDING
HUSBAND, WIFE AND THREE CHILDREN (BOY AGED 2, GIRL 6, AND
BOY 12)—Concluded.**

Boy 12 Years of Age.

Summer Clothing.		Year-round Clothing.	
Trousers, separate, cotton....	2	Caps	2
Overalls	1	Suits, wool	1
Union suits	3	Shirts or blouses, cotton....	5
Shoes, low	2	Pajamas or nightshirts.....	2
Winter Clothing.		Stockings, cotton.....	12
Trousers, separate, wool.....	1	Shoe repairing (half soles and heels)	5
Overcoats or mackinaws.....	$\frac{1}{2}$	Rubbers	1
Sweaters	$\frac{1}{2}$	Ties	2
Union suits	2	Handkerchiefs, cotton	6
Shoes, high	3	Garters, to be made at home	2
Gloves (knit)	2	Belts	$\frac{1}{2}$
		Miscellaneous	(*)

³ Lump sum of money equal to about 3 per cent of total cost of 12-year-old boy's clothing.

Girl, 6 Years of Age.

Article.	Replac- ment per year.	Article.	Replac- ment per year.
Summer Clothing.		Winter Clothing—Concluded	
Hats	1	Shirts	2
Dresses, cotton (to be made at home)	6	Drawers, knit	2
Petticoats, muslin	2	Nightgowns, outing flannel . . .	1
Shirts	3	Shoes, high	3
Drawers, muslin	5	Gloves or mittens (knit)....	1
Nightgowns (cotton).....	1	Year-round Clothing.	
Shoes, low	2	Aprons (to be made at home)	1
Winter Clothing.		Underwaists	4
Caps or hats.	$\frac{1}{2}$	Stockings, cotton	12
Dresses, wool (to be made at home)	$\frac{1}{2}$	Rubbers	1
Coats, wool	$\frac{1}{2}$	Handkerchiefs, cotton	6
Sweaters	$\frac{1}{2}$	Garters	2
Petticoats (outing flannel).....	1	Miscellaneous	(*)

⁴ Lump sum of money equal to about 8.5 per cent of total cost of 6-year-old girl's clothing.

Boy, 2 Years of Age.

Summer Clothing.		Winter Clothing—Concluded.	
Hats, duck	1	Nightgowns, outing flannel....	1
Undershirts	3	Shoes, high	2
Drawers	3	Mittens (knit)	1
Nightgowns, muslin	1	Year-round Clothing.	
Shoes, low (sandals).....	2	Dresses, cotton suits, rompers, overalls, etc. (to be made at home).....	3
Winter Clothing.		Underwaists	4
Caps	1	Stockings and socks, cotton..	10
Overcoats	$\frac{1}{2}$	Garters	2
Sweaters	$\frac{1}{2}$	Miscellaneous	(*)
Undershirts	2		
Drawers	2		

⁵ Lump sum of money equal to about 6 per cent of total cost of 2-year-old boy's clothing.

Individual tastes and variations in climate will, of course, make many changes and adjustments necessary for each family. Occupational requirements will also enter in, especially in the clothing budget of the husband. These variations could not be taken into consideration in preparing a general budget for a standard workman's family.

It is highly important to consider the clothing budget of each individual member of the family. In the husband's clothing, for instance, allowance has been made for the purchase of only two pairs of work trousers or overalls each year. This appears small until considered in conjunction with the allowances for suits. A summer suit and a winter suit, each to last three years, have been allowed. In other words, the purchase of two suits in three years has been provided, which means that every 18 months on the average the workman will be able to supplement his work clothes with one suit of discarded "dress up" clothes. Assuming that the workman's "Sunday" clothes are not subjected to very hard use, these suits when ready for every-day wear may reasonably be expected to form the major part of his work clothing, and not more than two additional pairs of work trousers will be required each year. Since suit coats usually outwear the trousers, no separate coats to wear with the work trousers have been deemed necessary.

No quantitative allowances have been made for raincoats, slippers, bathrobes, purse, repairs to watch, or any other item of clothing expense which occurs only occasionally. However, a lump sum of money equivalent to something like 7 per cent of the total cost

of the husband's clothing has been allowed to cover purchases of this character.

In the wife's clothing, the two new house dresses to be purchased each year may prove inadequate unless the old summer dresses of previous seasons are worn as everyday house dresses also.

Few women, especially where the climate permits of uniform underwear throughout the year, will wear all the varieties of underwear listed, i. e., winter union suits, summer union suits, combinations, corset covers, brassieres, petticoats, etc. However, the quantities listed under each are small, and where fewer kinds of articles are worn a larger quantity of each will be required.

This is distinctly a health and decency budget, with little provision for "style" or fashionable dress. No allowance has been made for an afternoon dress of silk, a silk petticoat or silk stockings. Although these articles are doubtless desirable, a wool dress, a suit skirt with a dress waist, a Venetian cloth or sateen petticoat and lisle or cotton stockings will supply all that is absolutely essential for health and decency.

To care for the multitudinous purchases of "extras," such as dress shields, veils, hairnets, hairpins, combs, slippers, handbag, dress trimmings, thread, buttons, etc., a lump sum of money about 8.5 per cent of the total cost of the wife's clothing has been suggested.

The clothing needs of growing children are almost beyond the ability of the budget maker to ascertain or estimate. A reasonably generous clothing allowance has been made for the children, but it is expected that some clothing will be handed down and made over for the younger children, in order to get along on the amounts specified.

In practically all the families visited in the Bureau of Labor Statistics' investigations there seems to be a general agreement that the expense for shoes and stockings for children is one of the serious drains on the family's finances. For the boy of 12, the budget allows for the purchase every year of three pairs of high shoes and two of low, with one repairing of half soles and heels for each of the five pairs. For the girl of 6 years, three pairs of high and two of low are allowed; for the boy 2 years, two pairs of high shoes and two of sandals. In the case of the two younger children, shoe repairing is not considered feasible and provision has not been made for it.

HOUSING.

A housing standard based upon health requirements must consider primarily air space, ventilation, lighting, sanitation, privacy and proper separation of the sexes. In applying these requirements to particular dwellings, the factors to be taken into account are number of rooms per person, sanitary conveniences, floor space, window space, location and frontage. The standard suggested below is for urban industrial communities, and conforms quite closely to actual housing conditions existing in industrial centers of the country.

Number of Rooms.

Figures collected by the Bureau of Labor Statistics in the 1918-19 study indicated that the majority of workingmen's families of average size and average income lived in houses which furnished approximately one room per person.

For 20 cities selected at random, and including all families scheduled regardless of size or income, those living in houses averaged 1.007 rooms per person, and those in flats and apartments 0.931 room per person. The standard health and decency budget must provide at the very least as many rooms per person as the average family were found to occupy. A housing standard of one room per person, exclusive of bath, has, therefore, been adopted as the minimum requirement consistent with health and decency.

For the average family of five persons a house of five rooms, consisting of living room, dining room, kitchen and two bedrooms, should be provided as the minimum health and decency. For the standard family, composed of husband, wife and three children, boy aged 12, girl aged 6 and boy 2, three sleeping rooms are needed in order to secure reasonable privacy—one bedroom for the parents and two for the children, one for each sex. To meet this need the living room can be arranged so as to be adaptable for sleeping purposes. Several arrangements are possible. A very practicable one would be to have three bedrooms, a living room and a combination kitchen and dining room. Still another would give a combined living and dining room, kitchen and three bedrooms, or two bedrooms, and a "parlor." The latter arrangement is especially desirable as the children grow up and begin to receive visitors in the home.

Size of Rooms.

Thus far only the number of rooms has been considered. For purposes of health it may be conceded that floor space is of more

importance than the mere number of rooms. The size of the various rooms adopted by the Bureau of Industrial Housing and Transportation of the Department of Labor, which undertook the war housing of the Government other than that required for shipbuilders, is given below.

	Minimum size.
Large bedroom	10x12 ft.
Small bedroom	8x10 ft.
Parlor or living-room	10x12 ft.
Dining-room	9x12 ft.
Kitchen (where there is no separate dining-room)	10x12 ft.

These standards are for the different rooms in detached, semi-detached, flat or row houses and represent the combined judgment of 25 architects, sanitary inspectors, builders and students of housing. It does not, however, seem advisable to incorporate in the housing standard to be adopted rooms of exactly the size prescribed in the above specifications.

Especially is this true since the standard herewith presented permits of considerable variation in arrangements. If only two bedrooms are provided, both of them should be of the "large" type, 10x12 feet. For a family of five, the "small" bedroom, 8x10, will scarcely be practicable, unless three sleeping rooms are to be provided. Whether a combined kitchen and dining room, or a combined living and dining room, is selected, a room larger than 10x12 is desirable. Assuming any of the arrangements possible in a five-room house, approximately 560 square feet of floor space, exclusive of bath, is the minimum health and decency requirement for the standard family of five persons. When space is provided for bathroom, closets, hall and storage space, the gross area of the standard house of five rooms has been fixed at 660 square feet. This gives little enough floor space for a family of five persons.

Light and Ventilation.

In the matter of light and ventilation, the requirements set up by the Bureau of Industrial Housing and Transportation of the Department of Labor seem to be entirely satisfactory. The paragraphs on ventilation are as follows:

Every room to have at least one window opening directly to the outer air. Two windows in each room generally preferred; one

window sufficient in small bedrooms. Each room to have a window area of not less than 12 square feet.

Cross ventilation as direct as possible to be provided for all rooms through windows, transoms or doors; communicating door recommended between front and rear bedrooms in row houses.

Every bathroom to have window of not less than 6 square feet in area, opening directly to the outer air.

Sanitation and Drainage.

In the 20 cities of the 1918-19 study of the Bureau of Labor Statistics selected, the families included over four-fifths of those in flats and apartments and over three-fifths of those in individual houses had inside water-closets. Over one-half of the families in both multiple dwellings and individual houses also had baths. It is felt that a housing standard which is to provide health and decency must include a complete bathroom, with toilet.

In connection with the standard house, such drainage should be provided as will render impossible stagnant pools on the premises or the collection of water in the cellar or underneath the house.

Construction and Arrangement.

A house must, of course, be built in compliance with housing laws, local building codes and ordinances. The roof must be water-tight, and the walls substantially and durably constructed so as to resist heat and moisture, according to the climatic conditions of the locality.

Accepting the constructional standards recommended by the Bureau of Industrial Housing and Transportation, the standard house should provide for closet or storage space. The halls, stairs and doors should be so constructed and located as to permit of easy moving of the furniture.

Porches are highly desirable and should be durably constructed. In most latitudes the porches may be made to serve all the year around as an additional sleeping room.

Neighborhood and Surroundings.

It is presumed that the standard house for the workingman's family will be located in a neighborhood with reasonably well maintained streets and fairly accessible to means of transportation, playgrounds and places of amusement and recreation. What is commonly termed a "slum" would not supply the proper neighbor-

hood surroundings for a house intended to supply the minimum requirements of health and decency.

Heat and Artificial Light.

It has not seemed feasible to adopt any special form of heating for the standard workingman's house. There is a wide range of means by which adequate heating may be had. Whatever the method of heating however, it should be such as to permit of heating the principal living room to a temperature of 68° F. in the coldest weather in any given locality. Small open grates in houses without double walls or air spaces in States as far north as Pennsylvania, as were found in the company housing survey of the Bureau of Labor Statistics, would not be in compliance with this standard.

Fuel consumption depends so much upon geographical location and climatic conditions that an attempt to establish minimum quantity standards seems impracticable. A definite standard for fuel would be complicated further by the various sizes and kinds of coal. In lighting, the various systems of gas, electricity and kerosene offer another obstacle to quantity standards since the system used usually does not depend so much upon the desire of the family as upon the character and equipment of the house.

Furniture and Furnishings.

No standard quantity budget has yet been established for the upkeep of household equipment. The Bureau of Labor Statistics has, however, worked out a list of furniture, furnishings and utensils necessary to equip completely a house of five rooms—living room, dining room, kitchen and two bedrooms—occupied by the standard family of five persons. The list of articles, together with a brief description, is given below.

NECESSARY HOUSEHOLD EQUIPMENT.

Furniture.

Article.	Num-ber.	Description.
Refrigerator	1	Smallest size and make sufficient in capacity for economical preservation of food and economy in the purchase of ice.
Tables:		
Dining-room	1	Oak extension table, plain, durable quality.
Living-room	1	Oak, plain, durable quality.
Kitchen	1	48-inch pine table, with 1 drawer.
Chairs:		
Dining-room	6	Plain durable oak.
Bedroom	4	Strongly made.
Living-room	4	Oak or other durable wood.
Kitchen	1	Painted wood.
High chair	1	
Rugs:		
Living-room	2	Small Axminster rugs.
Dining-room	1	Large Crax or Rattania.
Bedrooms	4	Rag or Crax rugs, 3 by 6 feet.
Gocart	1	Folding, with metal framework and cloth top.
Sewing machine.....	1	Standard make.
Settee or davenport.....	1	Oak or other durable wood, imitation leather upholstery.
Sideboard	1	Medium size, oak.
Bureaus	2	Plain bureau; 1 white painted bureau.
Chiffonier	1	White painted wood.
Beds, mattresses and springs:		
Double	1	Bedstead, plain (to match bureau); durable felt mattress and spring.
Single	2	Each: White enameled bedstead; durable felt mattress and spring.
Crib, mattress and spring.....	1	White enameled.

Furnishings.

Towels:		
Kitchen hand towels.....	3	Cotton.
Bath towels.....	10	Turkish.
Hand towels.....	12	Part linen.
Tablecloths	3	Cotton, to be hemmed at home.
Table cover.....	1	For use when table is not set.
Napkins	18	Part linen, 22-inch.
Blankets:		
Pair double-bed size.....	1	} Part wool.
Pairs single-bed size.....	2	
Pair crib size.....	1	
Comforts:		
Double-bed size.....	1	} Cotton, silkline covered.
Single-bed size.....	2	
Crib size.....	1	

NECESSARY HOUSEHOLD EQUIPMENT—Concluded.

Article.	Num-ber.	Description.
Spreads:		
Double-bed size.....	2	} Good grade of rippelette, medium weight; number sufficient to provide for laundering.
Single-bed size.....	3	
Pillows:		
Ordinary size.....	4	} Mixed feathers.
Crib size.....	1	
Sheets:		
Double-bed size.....	4	} Number sufficient to provide for laundering.
Single-bed size.....	6	
Crib size.....	4	
Pillowcases:		
Ordinary size.....	8	} Number sufficient to provide for laundering.
Crib size.....	3	
Dish towels.....	8	Cotton, to be hemmed at home.
Table oilcloth	1	For pine table.

Utensils.

Laundry tubs.....	2	Medium size, galvanized.
Washboard	1	Zinc.
Wringer	1	Medium size.
Boiler	1	Medium size, with copper bottom.
Flatirons	3	4, 5 and 6-pound irons.
Mops	2	1 handle for scrub mop, and one 16-ounce dry mop.
Brooms	2	Good quality broom.
Dishes:		
50-piece set.....	1	Plain.
Water pitcher.....	1	Plain heavy glass.
Vinegar cruet.....	1	Do.
Oil cruet.....	1	Do.
Salt shaker.....	1	Do.
Pepper shaker.....	1	Do.
Tumblers	6	Plain.
Knives, forks, etc.:		
Butter knife.....	1	} Quadruple plated, plain.
Sugar spoon.....	1	
Knives	6	
Forks	6	
Teaspoons	12	
Tablespoons	6	} Good quality steel knife and fork, and sharpener.
Carving set.....	1	

Utensils—Concluded.

Article.	Num-ber.	Description.
Kitchen utensils:		
Refrigerator pan.....	1	Galvanized.
Ice pick.....	1	Small, with wooden handle.
Garbage pail.....	1	Galvanized, medium size.
Towel rack.....	1	Wood, with three rods.
Soap dish.....	1	Wire.
Dish pan.....	1	Enameled.
Dish drainer.....	1	Heavy wire, with plate holders.
Teakettle.....	1	Enameled.
Coffeepot.....	1	Gray enamel.
Teapot.....	1	Do.
Preserving kettle.....	1	Do.
Jelly glasses.....	36	With covers.
Fruit jars.....	36	Jars holding 1 quart.
Stewpans or kettles.....	2	Enameled.
Cake pans.....	2	Heavy, pressed tin.
Pie pans.....	2	Pressed tin.
Bowls.....	2	
Large bread pans.....	2	Pressed tin.
Bread-raising pan.....	1	Heavy tin, with cover.
Roasting pan.....	1	Medium size.
Bread box.....	1	
Frying pans.....	2	1 small pan, 1 medium-sized iron pan.
Double boiler.....	1	Enameled, holding 1 quart.
Muffin pan.....	1	Tin, for 1 dozen muffins.
Colander.....	1	Gray enamel.
Chopping bowl and knife.....	1	Medium-sized bowl, single knife.
Meat grinder.....	1	Medium.
Potato masher.....	1	Wire, with wooden handle.
Egg beater.....	1	Medium size and weight.
Grater.....	1	Tin.
Strainer.....	1	
Bread board.....	1	18 by 24 inches.
Large salt shaker.....	1	
Biscuit cutter.....	1	Tin.
Rolling pin.....	1	
Flour sieve.....	1	Medium size.
Measuring cup.....	1	Tin or aluminum.
Lemon squeezer.....	1	Glass.
Can opener.....	1	
Large knife.....	1	
Case knives and forks.....	2	
Paring knife.....	1	
Wooden spoon.....	1	
Mixing spoons.....	3	
Pancake turner.....	1	

This budget assumes the existence of an equipment of household furniture similar to the above, since it is generally true that married couples purchase the major part of their household furniture either at or shortly after marriage. Consequently, the problem is to provide only for the necessary annual upkeep.

Conclusions as to the amount necessary for the annual upkeep of furniture and household furnishings for a family of five have been based on approximately 100 schedules, showing one year's expenditures for furniture and furnishings, secured in 1918-19 by the Bureau of Labor Statistics from families consisting of husband, wife and three children under 15 years of age, living in large Eastern or Middle Western cities and having a total annual expenditure of \$1,500 and under \$2,100.

Inasmuch as the families studied spent annually from \$1,500 to \$2,100, they were presumably living at a fairly decent and healthful standard. Their household equipment, therefore, may be regarded as reasonably sufficient both in quantity and quality, although, of course, not luxurious. From the special study of the expenditures of these families for furniture and furnishings, the Bureau of Labor Statistics has calculated tentatively that the amount of annual upkeep of household equipment approximates 7 per cent of the total cost of purchase. In the budgets which the Bureau of Labor Statistics has prepared, the practice has been followed of ascertaining the approximate cost at current prices of the above list of household equipment and then allowing 7 per cent of the total renewal cost for annual upkeep. Such a figure, however, is of no use in determining a quantity standard, but it is a guide to the amount which should be allowed in the cost budget.

Miscellaneous.

Under miscellaneous expenditures a quantity standard is possible in only a limited number of items. Following are the principal miscellaneous items which must be provided for in the cost budget of the family:

Laundry work.
Cleaning supplies and services.
Maintenance of health.
Insurance:
 (a) Life (disability).
 (b) House and furniture.
Carfare:
 Husband.
 Wife and children.

Amusements and recreation.
Newspapers.
Organizations:
 (a) Church.
 (b) Labor.
Incidentals, including—
 Tobacco.
 Telephoning and telegraphing.
 Stationery and postage, etc.

Expenditure for assistance with laundry work may not be considered possible in the family of an industrial worker. However, from the standpoint of health, it seems that the mother of three children who must do the cooking for the family, the general clean-

ing of the house, the sewing and mending, the marketing and shopping should be allowed assistance with the family laundry work and scrubbing, amounting to one day per week.

The following quantities seem to provide the minimum requirement of cleaning supplies and services to insure personal and household cleanliness:

Cleaning Supplies and Services.

	Quantity.
Personal:	
Toilet soap, small bar	90
Toothbrush	5
Toothpaste, tube or box	12
Combs, hard ruber	1
Hairbrushes	½
Shoe polish, box	6
Barber's services—	
Husband, hair cut	12
Children, hair cut	8
Household:	
Laundry soap, ½-pound bar	150
Starch, pound	6
Cleanser, box	36
Small lump sum for unspecified cleaning supplies and services, such as borax, ammonia, washing powder, bluing, insect powder, etc.	

Some allowance must, of course, be made for the maintenance of health. This item includes expenditures for physician, dentist, oculist, glasses and drugs, including prescriptions and prepared remedies.

No definite number of doctor's visits can be assumed as necessary, but aside from the occurrence of major illnesses, colds and the various diseases of childhood will doubtless make a doctor's services necessary at some time during the year.

At least one visit to the dentist during the year for three members of the family will be necessary, and rarely does one visit prove sufficient.

There is, however, no available quantitative measurement, and the Bureau of Labor Statistics, in preparing budgets, has had to resort to the average expenditure for health of large numbers of families investigated.

In the first standard budget prepared by the Bureau of Labor Statistics provision was made for a life insurance premium sufficient to pay for a \$5,000 policy for the head of the family. This was

considered the absolute minimum for protection and safety, since in the event of the husband's death it would furnish an income to the wife and children of not over \$300 a year, or \$6 a week. With the increased cost of living this amount is clearly insufficient. To give the same degree of protection as was accorded in 1914 by a \$5,000 policy it would now be necessary for the husband to carry \$10,000. Granting that, in order to help carry the burdens of the war, the workingman and his family must make some sacrifices in their standards of living, it would certainly be inadvisable at this time to advocate a policy of less than \$7,500 for the head of the family.

It is highly important that every family should carry insurance on the family dwelling, if owned, and on household furniture. The loss of household equipment is an extremely serious matter to a family of low income. The budget should provide for the premium on a policy large enough to cover the replacement cost of the family's essential personal property in case of loss by fire.

The quantitative standard for carfares will have to be determined locally in each city for which a budget is prepared. If the husband is compelled to ride regularly to and from his work, at least 600 rides will be required.

If the wife is compelled to use a street car for shopping and marketing, the necessary allowance must be made for this also.

It is impossible to establish quantity standards for amusements and recreations. The importance of recreation as a factor in healthy living need not, of course, be emphasized. It is accepted as an everyday fact. The only question is as to the character and cost of such recreation. Much wholesome amusement arises naturally within the circle of a family and its friends, and costs nothing. On the other hand, the complexity of modern city life places a money price on many simple and desirable forms of amusement. Thus a picnic for a family, or a visit to the park, involves a considerable item of carfare, while a trip on the river will cost a dollar or more. Moreover, occasional visits to the moving pictures are to be expected of at least some members of a family. Thus, even though the more expensive forms of amusement and recreation, such as summer vacations, are eliminated, some expenditures for this item are absolutely necessary if a family is not to lead a completely isolated life.

One daily newspaper should be provided for the workingman's family, and at least one good magazine is indispensable for a proper standard of living.

Organizations, such as the church and labor unions, play such an important part in the life of the average worker and his family that

some expenditure on this account must be regarded as essential to normal living, but no quantitative standard can be established.

In addition to the items listed above there are a large number of other expenses, mostly small or occasional, which cannot be entirely avoided by a worker's family—such, for instance, as stationery and postage, telephoning and telegraphing at times, tobacco, etc. No minimum quantities for these items can possibly be specified, and the only solution is to grant a modest sum of money to cover expenditures for incidentals.

II

BUDGET FOR A GOVERNMENT EMPLOYEE'S FAMILY IN WASHINGTON, D. C.

U. S. BUREAU OF LABOR STATISTICS, 1919.

This budget was prepared by the United States Bureau of Labor Statistics under the full title, "Tentative Quantity and Cost Budget Necessary to Maintain a Family of Five in Washington, D. C., at a Level of Health and Decency." The study was made in July and August, 1919, and the prices are as of August. The following reprint includes practically all of the published report except those portions dealing solely with an analysis and explanation of prices.

This report presents the results of a study made by the United States Bureau of Labor Statistics to determine the cost of maintaining the family of a Government employee in Washington at a level of health and decency. This involved two inquiries: (1) The establishing of a "quantity budget," i. e., the number or quantity of the various things necessary to maintain the living level referred to; and (2) the ascertaining of the total cost of such a budget at the prices prevailing in Washington at the present time (August, 1919).

DIFFICULTY OF ESTABLISHING A PROPER BUDGET LEVEL.

Previous studies of the subject have analyzed the conception of a budget level and have distinguished several levels. Some of the more important of these are as follows:

(a) *The pauper or poverty level.*—This represents roughly a standard of living just above where families receive aid from charity or where they run into serious debt.

(b) *The minimum of subsistence level.*—This is based essentially on mere animal existence and allows little or nothing for the needs of men as social creatures.

(c) *The minimum of health and comfort level.*—This represents a slightly higher level than that of subsistence, providing not only for the material needs of food, shelter, and body covering, but also for certain comforts, such as clothing sufficient for bodily comfort and to maintain the wearer's instinct of self-respect and decency,

some insurance against the more important misfortunes—death, disability, and fire—good education for the children, some amusement, and some expenditures for self-development.

Inasmuch as the primary aim of this study was to furnish information for use by the Joint Commission of Congress on Reclassification of Salaries, the minimum of health, decency, and comfort was kept in mind in determining the quantity budget and in selecting qualities and ascertaining prices of articles of the budget. Clearly neither a pauper budget level nor a mere subsistence level should or could be submitted. But, when the effort was made to go further than this, to determine a level above mere subsistence, but not so high as to be unreasonable for the purpose for which it was to be used, serious difficulties arose. Part of the difficulty was a matter of terminology. Phrases such as "a comfort level" or a "level of reasonable comfort" are by no means clear cut, and much discussion can arise as to just what particular "comforts" should be included.

BUDGET LEVEL USED IN THIS STUDY.

Finally, after long consideration, it was decided to use as a working basis a budget level which can be best expressed perhaps by the phrase "a standard of health and decency." This phrase is not entirely precise in meaning. No phrase of the kind can very well be wholly satisfactory. The budget herewith suggested is intended to give to the average family, consisting of husband, wife, and three children below the age of 14 years—

- (1) A sufficiency of nourishing food for the maintenance of health, particularly the children's health;
- (2) Housing in low-rent neighborhoods and within the smallest possible number of rooms consistent with decency, but with sufficient light, heat, and toilet facilities for the maintenance of health and decency;
- (3) The upkeep of household equipment, such as kitchen utensils, bedding, and linen, necessary for health, but with no provision for the purchase of additional furniture;
- (4) Clothing sufficient for warmth, of a sufficiently good quality to be economical, but with no further regard for appearance and style than is necessary to permit the family members to appear in public and within their rather narrow social circle without slovenliness or loss of self-respect.
- (5) A surplus over the above expenditures which would permit of only a minimum outlay for such necessary demands as—

- (a) Street car fares to and from work and necessary rides to stores and markets;
- (b) The keeping up of a modest amount of insurance;
- (c) Medical and dental care;
- (d) Contributions to churches and labor or beneficial organizations;
- (e) Simple amusements, such as the moving pictures once in a while, occasional street car rides for pleasure, some Christmas gifts for the children, etc.;
- (f) Daily newspaper.

THE STANDARD FAMILY.

This budget has been worked out for a family consisting of husband, wife, and three dependent children—a boy of 11, a girl of 5, and a boy of 2 years of age. The number in the family and the ages of the children conform closely to the standards used by the Bureau of Labor Statistics and other investigators in the past. The determining factor in selecting the standard family, however, was the fact that a family of this particular size and composition represents actual existing families in the United States. The average number in the white families scheduled by the Bureau of Labor Statistics was 4.9 individuals (equivalent to 3.33 adult males), which corresponds very closely with the standard family of 5 individuals (equivalent to 3.35 adult males). The assumption that the three children of the family are, respectively, a boy aged 2 years, a girl aged 5 years, and a boy aged 11 years, is, of course, arbitrary and is solely for the purpose of making precise calculations as to food and clothing consumption. The children in this standard family are growing children, not yet able to add anything to the family income, and not so expensive to maintain as they will become a few years later. This standard family is about half way between the family with no children and the family with grown children capable of self-support.

BUDGET OF HEALTH AND DECENCY NOT INTENDED AS AN IDEAL.

It needs to be emphasized that the budget level adopted in the present study is in no way intended as an ideal budget. It was intended to establish a bottom level of health and decency below which a family cannot go without danger of physical and moral deterioration. This budget does not include many comforts which should be included in a proper "American standard of living."

Thus no provision is directly made for savings other than insurance, nor for vacations, nor for books and other educational purposes.

On the other hand, a family with the items listed in this budget should be able to maintain itself in health and modest comfort. It would have a sufficiency of food, respectable clothing, sanitary housing, and a minimum of the essential "sundries."

THE COST OF A BUDGET LEVEL NOT NECESSARILY A FIXED MONEY COST.

The annual expense of maintaining the budget level above described may be arrived at by obtaining and totaling the current prices on each of the individual items entering into the budget. This has been done as part of the present study and a total figure arrived at which measures the annual money cost of all the budgetary items at the prices now prevailing in Washington, D. C.

It is highly important to note, however, that the maintenance of living on the level indicated does not necessarily require the receipt of an annual income of precisely this amount. This is so for several reasons. Thus the family here used as a basis of computation is one consisting of husband, wife and three dependent children, 11, 5, and 2 years old. A newly married couple does not start house-keeping with a family of 3 children. It is assumed that before marriage and in the early years of marriage savings will have been accumulated either in the form of money savings, household equipment, or partial ownership of a home. These accumulations must be depended upon to tide the family over the period when the children become the greatest burden, just before the oldest one is able to earn his own support in whole or in large part. This budget assumes the existence of an equipment of household furniture, as it is generally true that married couples do purchase the major part of their household furniture either at marriage or shortly thereafter. If the family has savings invested, the family income is supplemented by the amount of interest received; if the house is owned the cost of the budget level here provided for would be reduced by the saving in the expenditure for rent. Another factor tending to reduce the cost of the budget below the market cost of the individual items is the extraordinary ingenuity of most families in economizing, particularly when the need for the closest economy is regarded as only of temporary duration. This ingenuity expresses itself in many ways, and, for the most part, ways which a budget study such as the present one cannot specify or estimate. The average housewife is not a perfect cook, a perfect seamstress, or a perfect "shopper," nor

does she have time, even if she has the ability, to attain 100 per cent efficiency in cooking, tailoring, shopping, and the many other skilled trades which she must practice as time and capacity permit. On the other hand, almost every housewife does possess certain abilities along one or more lines and by the exercise thereof is able to reduce expenditures along these lines to below the average. However, no housewife can reasonably be expected to perform more than one miracle of domestic economy each day.

In many families the husband, and even the children, are able to contribute certain services—such as marketing, housework, repairs of household—which may reduce the need for actual money expenditure or may permit the housewife to do a greater amount of sewing, such as the making over of garments.

In these and many other ways families are often—it might even be said usually—able to maintain a decent standard of living at a somewhat lesser cost than the market prices of the budgetary items. Clearly these economies can be effected only at considerable sacrifice of time and convenience, and the possibilities of such economies are often greatly overestimated. The not infrequent criticism of standards of living studies that families do actually live on smaller incomes than those indicated is, in itself, not a valid criticism. Families may and do live, although underfed, underclothed, unhealthily housed, overworked, especially the wife and mother, and deprived, particularly the children, of many things essential to the development of healthy and useful citizens. * * *

SUMMARY OF BUDGET.

Cost of quantity budget at market prices.

I. Food		\$773.93
II. Clothing:		
Husband	\$121.16	
Wife	166.46	
Boy (11 years).....	96.60	
Girl (5 years).....	82.50	
Boy (2 years).....	47.00	
		513.72
III. Housing, fuel, and light.....		428.00
IV. Miscellaneous		546.82
		<hr/>
Total budget at market prices.....		2,262.47

Possible saving upon market cost by a family of extreme thrift, of high intelligence, great industry in shopping, good fortune in purchasing at lowest prices, and in which the wife is able to do a maximum amount of home work:

I. Food (7½ per cent).....	\$58.04	
II. Clothing (10 per cent).....	51.37	
III. Housing	30.00	
IV. Miscellaneous	107.50	
		<hr/>
Total economies..		246.91
		<hr/>
Total budget minus economies.....		\$2,015.56

Savings.—No provision is made in this budget for savings, other than the original cost of household furniture and equipment, which would average about \$1,000 in value. No definite estimate, of course, can be made as to the amount which a low-salaried Government employee should be expected to save. But an average saving of 12½ per cent of yearly salary during an employee's single and early married life would seem to be the maximum which could be expected. Over a period of, say, 15 years this would result in a total accumulation of about \$2,000. Assuming \$1,000 of this to be invested in household equipment, there would be a net sum of \$1,000 available for investment in a home or in other direct income-producing form. In any case, it would represent an annual income of approximately \$50.

*Itemized Details of Budget.***I. FOOD.**

Item.	Unit of usual purchase.	Weekly quantity per family of 3.35 equivalent adult males.	Weekly cost.
Beef and veal, fresh ¹	Pound	4.35	\$1.64
Beef, salt ¹	do.	.38	.14
Pork, fresh ¹	do.	.74	.38
Pork, salt, including smoked ham and bacon ¹	do.	1.03	.53
Mutton ¹	do.	.60	.22
Poultry ¹	do.	.52	.24
Other meat, including sausage, dried beef, etc. ¹	do.	.66	.35
Fish and other sea food ¹	do.	1.31	.39
Eggs.....	Dozen	1.31	.79
Milk, sweet, and buttermilk ²	Quart	8.86	1.35
Cream.....	Pint	.06	.02
Milk, condensed.....	Pound	1.25	.25
Butter and oleomargarine.....	do.	1.87	1.18
Cheese.....	do.	.38	.19
Tea.....	do.	.19	.15
Coffee and substitutes.....	do.	.78	.41
Sugar.....	do.	3.13	.34
Molasses, including sirup and honey.....	do.	.68	.12
Lard and compounds.....	do.	1.10	.44
Flour.....	do.	7.50	.60
Corn meal.....	do.	1.23	.07
Bread ³	do.	9.66	1.01
Rice.....	do.	.85	.14
Cereals.....	do.	2.21	.33
Fruits, fresh.....	do.	7.71	.70
Fruits, dried and canned.....	do.	.70	.18
Potatoes.....	Peck	.95	.71
Other vegetables, fresh and dried.....	Pound	10.89	.88
Other vegetables, canned.....	do.	.84	.24
Other food ⁴	do.	1.83	.66
Weekly total.....			[*] \$14.55
Yearly total.....			[*] \$755.93
Ice.....			18.00
Total.....			[*] \$773.93

¹Total meat and fish equivalent to 1.37 pounds per day.²Equivalent to 1.27 quarts of milk per day.³Equivalent to 1.38 pound loaves of bread per day.⁴Including crackers, cake, pies, ice cream, candy, jelly, oil, chocolate, peanut butter, cocoa, nuts, gelatin and canned soup.^{*}The weekly quantity budget has been drafted from the year's budget, which explains the slight difference in cost between the weekly total and the yearly total.

II. CLOTHING.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Husband.			
Hat, felt.....	\$4.00	$\frac{1}{2}$	\$2.00
Hat, straw.....	2.00	1	2.00
Suit, winter (wool).....	40.00	$\frac{1}{2}$	20.00
Suit, summer (wool).....	40.00	$\frac{1}{2}$	20.00
Overcoat	40.00	$\frac{1}{4}$	10.00
Raincoat	15.00	$\frac{1}{6}$	2.50
Shirts, cotton.....	2.00	5	10.00
Union suit, summer.....	1.50	3	4.50
Union suit, winter (part wool).....	3.50	1	3.50
Pajamas	2.50	1	2.50
Socks, cotton.....	.50	12	6.00
Shoes:			
High	7.50	1	7.50
Low	7.50	$\frac{1}{2}$	3.75
Shoe repairing:			
Whole soles.....	3.50	1	3.50
Half soles, including heel.....	2.50	1	2.50
Rubbers	1.25	$\frac{1}{2}$	.63
Gloves, kid.....	3.00	$\frac{1}{2}$	1.50
Collars .....	.25	12	3.00
Ties .....	.50	3	1.50
Handkerchiefs .....	.25	8	2.00
Garters .....	.35	2	.70
Belt	1.50	$\frac{1}{2}$	.50
Suspenders .....	.75	1	.75
Umbrella	4.00	$\frac{1}{2}$	1.33
Cleaning, pressing.....	1.50	4	6.00
Miscellaneous			3.00
Total.....			\$121.16
Wife.			
Summer clothing.			
Hat	\$7.50	1	\$7.50
Wash skirt.....	5.00	$\frac{1}{2}$	2.50
Waists, cotton (to be made at home).....	2.50	3	7.50
Waist, dress.....	7.50	$\frac{1}{2}$	3.75
Dresses, cotton, thin (to be made at home)	5.00	2	10.00
Underwear (separate garments or union suits).....	1.00	3	3.00
Petticoats, cotton, muslin.....	2.00	1	2.00
Shoes, low.....	8.50	1	8.50
Gloves, cotton.....	1.00	1	1.00
Winter clothing.			
Hat	10.00	$\frac{1}{2}$	5.00
Suit, wool.....	53.00	$\frac{1}{2}$	26.50
Dress, wool serge.....	25.00	$\frac{1}{2}$	12.50
Coat, wool.....	50.00	$\frac{1}{3}$	16.66
Petticoat, dark cotton.....	3.00	1	3.00
Underwear (union suit, part wool).....	3.00	1	3.00
Shoes, high.....	9.50	1	9.50
Gloves, kid.....	2.50	$\frac{1}{2}$	1.25

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Year-round clothing.			
House dresses	\$3.00	2	\$6.00
Apron, kitchen . . . . .	.60	1	.60
Corset (standard make)	6.00	1	6.00
Corset covers . . . . .	.85	3	2.55
Brassieres . . . . .	.50	2	1.00
Night dresses	1.50	2	3.00
Kimono	4.50	$\frac{1}{2}$	2.25
Stockings, cotton . . . . .	.65	8	5.20
Shoe repairing:			
New heels . . . . .	.40	3	1.20
Whole soles	3.00	1	3.00
Handkerchiefs . . . . .	.25	8	2.00
Umbrella	3.00	$\frac{1}{2}$	1.00
Rubbers	1.50	1	1.50
Cleaning and pressing	3.00	1	3.00
Miscellaneous			5.00
Total			\$166.46
Boy, 11 Years of Age.			
Caps or hats	\$1.00	2	\$2.00
Suit, wool	16.00	1	16.00
Pants, separate, wool (winter)	3.00	1	3.00
Pants, separate, wool and cotton (summer)	2.00	2	4.00
Overcoat	12.50	$\frac{1}{2}$	6.25
Sweater	6.00	$\frac{1}{2}$	3.00
Overalls	1.25	1	1.25
Shirts or blouses, cotton	1.15	5	5.75
Summer underwear (union suits)	1.00	3	3.00
Winter underwear (union suits)	3.00	2	6.00
Pajamas or nightshirts	1.00	2	2.00
Stockings . . . . .	.60	12	7.20
Shoes:			
High	5.00	3	15.00
Low	3.00	2	6.00
Shoe repairing (whole soles)	2.00	5	10.00
Rubbers	1.00	1	1.00
Gloves or mittens . . . . .	.50	2	1.00
Collars . . . . .	.25	3	.75
Ties . . . . .	.50	2	1.00
Handkerchiefs . . . . .	.10	6	.60
Garters . . . . .	.25	2	.50
Belt . . . . .	.60	$\frac{1}{2}$	.30
Miscellaneous			1.00
Total			\$96.60

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Girl, 5 Years of Age.			
Hat, summer.....	\$5.00	1	\$5.00
Cap or hat, winter:			
Cap	2.00	1	} 2.00
Hat	5.00	$\frac{3}{4}$	
Dresses, cotton (to be made at home)....	2.25	6	13.50
Dress, wool (to be made at home).....	6.00	$\frac{1}{2}$	3.00
Apron (to be made at home).....	1.00	1	1.00
Coat	15.00	$\frac{1}{2}$	7.50
Sweater	4.00	$\frac{1}{2}$	2.00
Cotton petticoats:			
Muslin	1.00	2	2.00
Outing flannel.....	1.50	1	1.50
Summer underwear:			
Shirts .....	.50	3	1.50
Drawers, muslin.....	.30	5	1.50
Underwaists .....	.75	4	3.00
Winter underwear:			
Shirts, wool.....	1.50	2	3.00
Drawers, wool.....	1.50	2	3.00
Nightdresses:			
Muslin	1.00	1	1.00
Outing flannel.....	1.25	1	1.25
Stockings, cotton.....	.40	12	4.80
Shoes:			
High	4.00	3	12.00
Low	3.00	3	9.00
Rubbers .....	.85	1	.85
Mittens .....	.50	1	.50
Handkerchiefs .....	.10	6	.60
Garters .....	.25	2	.50
Miscellaneous			2.50
Total.....			\$82.50
Boy, 2 Years of Age.			
Hats or caps:			
Hat, duck.....	\$.50	1	\$.50
Cap .....	.75	1	.75
Dresses, cotton suits, rompers, overalls, etc. (to be made at home).....	1.00	8	8.00
Overcoat	12.00	$\frac{1}{2}$	6.00
Sweater	3.50	$\frac{1}{2}$	1.75
Summer underwear:			
Undershirts .....	.50	3	1.50
Drawers, muslin.....	.30	3	.90
Underwaists .....	.65	4	2.60
Winter underwear:			
Undershirts	1.00	2	2.00
Drawers	1.00	2	2.00

II. CLOTHING—Concluded.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Boy, 2 Years of Age—Concluded			
Nightdresses:			
Muslin	\$1.00	1	\$1.00
Outing flannel.....	1.25	1	1.25
Stockings and socks, cotton.....	.39	10	3.90
Shoes:			
High	3.50	2	7.00
Low (sandals).....	3.00	2	6.00
Mittens .....	.35	1	.35
Garters .....	.25	2	.50
Miscellaneous			1.00
Total.....			\$47.00

III. HOUSING, FUEL, AND LIGHT..... \$428.00
 (This item covers rent at \$300 a year, and fuel and light at \$128 a year.)

IV. MISCELLANEOUS.

Upkeep of house, furniture, and furnishings.....	\$70.00
Laundry work.....	104.00
Cleaning supplies and services.....	32.92
Health	80.00
Insurance:	
(a) Life (disability).....	110.00
(b) Furniture	1.50
Car fare:	
Husband, 600 rides.....	30.00
Wife and children, 300 rides.....	15.00
Amusements and recreation.....	20.00
Newspapers	8.40
Organizations:	
(a) Church	13.00
(b) Labor	10.00
Incidentals	52.00
	\$546.82

DETAILED DATA UPON WHICH BUDGET IS BASED.

I. Food.

In the determination of a proper family dietary there are two standards which must be assumed at the beginning, (1) the scientifically established food requirement in calories per day, and (2) the commonly recognized unit of measure of the size of family in equivalent adult males.

Various scientific students of food have estimated that the number of calories needed by a man at moderately hard muscular work is 3,500 per day. A family usually wastes about 10 per cent of the caloric value of food in preparation, cooking, etc., and also a small per cent of the food which enters the mouth is not digested or assimilated. Therefore, 3,500 calories purchased represents approximately 3,100 to 3,200 calories actually consumed by the body. The standard of 3,500 calories is for a man at moderately hard muscular work, and since most Government clerks are engaged in very light muscular labor the 3,100-3,200 calories would appear to be sufficient. On the other hand, when Government employees are taken as a whole, and when those who are engaged in moderately hard physical work in the Government Printing Office and the Bureau of Engraving and Printing are taken into consideration, the allowance of 3,500 calories purchased to yield 3,100-3,200 seems to be none too high.

The standard of a definite number of calories per man per day makes it necessary to ascertain the food requirements of the other members of the family and convert them into terms of a common unit of measurement, namely, the equivalent adult male. In order to make precise calculations, the following food budget has been drawn up on the basis of a family of 5—husband, wife, and 3 children, boy, aged 11; girl, 5, and boy, 2. According to the standard established by the United States Bureau of Labor Statistics, taking the caloric requirement of a man as 1.0, that of a woman is 0.9; a boy of 11 years, 0.9; a girl of 5 years, 0.4; and a boy of 2 years, 0.15. The combined food requirements of this family, which is considered an average-sized family and has been taken as a normal family, would be equal to that of 3.35 adult males.

The quantity food budget submitted here as representing the minimum food requirements of a family of 5 was obtained by averaging the actual amounts of food used by 280 selected families with three children of about the ages indicated. The families chosen from each city averaged in size approximately 3.35 equivalent adult males, and

3,500 calories of food purchased per man per day. On further detailed analysis, and by comparison with a recognized standard, the average dietary of 3,500 calories thus obtained was found to consist of meat, milk, vegetables, etc., in such proportions as to furnish the body in a general way with the necessary amounts of proteins, fats, carbo-hydrates, mineral constituents, acids, and other substances necessary for the maintenance of health. Following is a comparison of the food allowance of this budget with the minimum standards generally accepted by scientific students of the subject:

OUNCES OF FOOD CONSUMED PER MAN PER DAY.

	Meat.	Fish.	Dairy prod- ucts.	Milk.	Ce- reals.	Vege- tables.	Fruits.	Fats.	Sugar.
Average of 280 families	5.6	0.9	15.5	12.1	15.1	17.6	5.8	2.1	2.7
Standard	4 or 5	2	16	11 or 12	12	16 or 20	16 or 20	2	2

The 280 food budgets used in obtaining this average were selected from family schedules collected by the Bureau of Labor Statistics in the recent cost-of-living survey of the United States. These schedules were taken in great detail, giving, among other things, the amount of each article of food purchased for a year for each family scheduled. The 280 budgets used in this detailed caloric analysis were made up from about 25 cases from each of 11 representative cities.

It would, of course, have been preferable to analyze in detail 280 food budgets collected from families in the District of Columbia, but the time allowed for the present minimum budget prohibited any such plan. It seems likely, however, that the average dietary here presented is not far from correct. By taking an average of families located over a considerable area, all local peculiarities and extreme tastes should have been smoothed out. The applicability of this average budget to the city of Washington is further substantiated by the fact that the population here is unusually cosmopolitan, due to the working of the apportioned civil service.

Another possibility would have been to use accepted standards as a guide and construct a dietary composed of meats, vegetables, milk, etc., which would meet the ideal requirements. This method, however, would have been difficult, more or less arbitrary, and subject to the criticism that it would not meet the actual desires and peculiarities of people as they are. Of course, the average dietary has its

obvious defects, and is not recommended as ideal. For instance, it is highly desirable, from both an economical and a dietary standpoint, for a family to secure its protein by the use of more eggs and less meat than the quantities used in the average budget. As here presented, the food budget which has been arrived at is based on what the experience of a large number of families in various sections of the country shows to be a practical minimum for the maintenance of health. That the selection of foodstuffs is probably as economical as is consistent with a fairly balanced diet is indicated by the fact that the families whose dietaries are here used were all workingmen's families in moderate circumstances. * * *

II. CLOTHING.

The quantities of the different kinds of clothing required by the standard family have been arrived at by personal interviews with Government employees and their wives and others familiar with the standard of living required of the Government worker's family in Washington, and have been checked with several previous studies, particularly with the clothing budgets of approximately 850 families with children under 15 secured by the Bureau of Labor Statistics in 1918-19.

In preparing the following budget the quantity of clothing based on length of wear has been made fundamental and agreed upon before tabulating prices. The quantities listed in the budget are for annual replacements, and it has been assumed that the amounts listed will be supplemented by the "holdover" of similar garments from the previous year. In the case of a garment which may be expected reasonably to last over a period longer than one year, the annual amount has been expressed in a fraction, i. e., a coat to be worn two years, as $\frac{1}{2}$; three, as $\frac{1}{3}$, etc.

A few possible alternatives have been suggested, and individual tastes will, of course, make other changes and adjustments necessary for each family.

In preparing this quantity budget a considerable amount of sewing at home has been assumed as possible, and has been indicated accordingly. When more than the specified amount is done, a saving may be effected, or the family clothed more abundantly. On the other hand, where little or no home sewing can be done, economy will need to be practiced in the number of garments or along other lines.

Theoretically, the level of health and decency in clothing has been interpreted as a level which takes into account not only the physical needs of warmth, cleanliness and comfort, but which also has such

regard for appearance and style as will permit the family members to appear in public, and within their necessarily rather narrow social circle, with neatness and self-respect. In other words, the clothing standards of the family should provide a fair degree of that mental satisfaction which follows from being reasonably well-dressed. But while admitting the desirability of this more generous wardrobe, an effort has been made to allow only those quantities of clothing consistent with the *minimum* requirement for health and decency, and, where a doubt has existed, to err on the side of conservatism rather than to present an opportunity for the criticism of extravagance. So emphatic, however, have been the expressions of some who feel that a decided error has been made on the side of rigid economy that a supplemental list of highly desirable additions to the wife's clothing has been prepared and made a part of this report. * * *

Supplemental List of Wife's Clothing.

The clothing budget has been cut down to what amounts to almost a subsistence budget. In the case of the wife, it would be highly desirable from the point of view of comfort and of the standard expected of the wife of a Government employee that she be allowed at least \$50 more per year on her clothing budget. The prices given presuppose more time to hunt for good values than the average mother of three children can afford. She is allowed no furs, and the suit allowed is of rather light weight, so that for the sake of her own health it would be much better if she could afford to buy a better coat for winter wear.

She has been allowed only one afternoon dress of wool to last two years, and she has been allowed no dress petticoat to wear with it. It would be much more satisfactory if she were allowed one jersey-silk petticoat a year. This would cost a little more than the cotton one, but would combine comfort and durability. It is questionable if the georgette waist allowed every other year can be made to last two years even with the most careful laundering and this is her only fancy blouse. The same is true of the two cotton house dresses allowed.

The wife has been allowed one wool dress every two years for afternoon or evening wear. Aside from her suit and georgette blouse this wool dress is the only garment she has to wear to social affairs of the church and community. A wool dress is essentially a business or street dress, being too heavy and sombre for afternoon or evening wear. A silk dress would be a much more satisfactory article with which to supplement her suit and georgette blouse during the second

season's wear, when they have grown somewhat worn and shabby. The substitution of a silk dress in place of wool serge will add only \$7.50 annually to the wife's clothing budget, as silk dresses of fair quality can be bought in the Washington stores for \$40.

Only two night dresses a year have been allowed, and these will be insufficient if she has any illness during the year.

A winter hat has been allowed only every other year and no allowance has been made for retrimming. Without retrimming it will be out of style by the second year, and while the average woman should not and will not desire to wear extreme styles, neither will she wish to be conspicuous because her clothing is entirely out of the prevailing mode.

It would be highly desirable from the standpoint of comfort, and probably of economy, if the wife were allowed two pairs of silk stockings each year. The cotton stockings on the market are of poor grade and high price at the present time and neither so comfortable nor neat looking as the silk hose.

The shoes allowed are heavy walking shoes. It would add to the wife's comfort if she were allowed one pair of dress shoes at least every other year. No allowance has been made for house slippers, and this means that she must make her low shoes of the previous year hold over for this purpose.

The \$5 allowance for miscellaneous items is very small when the simplest collar and cuff set is at least a dollar, when hair nets that last only a few days are 12½ cents each, and when all other miscellaneous items have doubled in price. It would appear that an allowance of \$10 would more nearly meet her needs for miscellaneous items.

ADDITIONAL LIST OF DESIRABLE ARTICLES FOR WIFE'S CLOTHING.

Article.	Quantity allowed.	Quantity desirable.	Additional cost to yearly budget.
Winter hat.....	½	1	\$5.00
Better quality winter coat.....	½	½	8.32
Silk petticoat.....	0	1	6.00
Silk stockings.....	0	2	3.00
Crepe de chine or georgette blouse.....	½	1	3.75
Night dresses.....	2	3	1.50
House dresses.....	2	3	3.00
Dress shoes.....	0	½	6.00
House slippers.....	0	½	1.00
Miscellaneous	(¹)	(¹)	5.00
Substitution of silk dress for serge.....	½	½	7.50
Total.....			\$50.08

(¹) Amount allowed, \$5; amount desirable, \$10.

III. HOUSING, FUEL AND LIGHT.

Annual cost of rent, fuel, and light..... \$428

Housing standard.—The minimum housing standard for a family of five has been taken as one of four rooms with bath and running water. The possession of a bath and running water is necessary to health and cleanliness. Moreover, at the present time practically all houses and apartments in Washington are supplied with these conveniences, except very old structures, which even in other respects cannot be accepted as offering decent and healthful housing. The possession of four rooms is absolutely necessary to a family of five to prevent extreme overcrowding, and is, of course, the barest minimum. It would mean a kitchen, a combined living and dining room, and two bedrooms, with the necessity in many cases of the combined living and dining room being also used as a sleeping room. For the particular family used in this study as a type, five rooms and bath would be the only comfortable minimum. In any case, this strict minimum can apply only to apartments. The standard small house in Washington is one of six rooms. Houses of four and five rooms (except some very modern suburban bungalows) are almost entirely very old structures without modern conveniences.

Fuel and light standard.—Certain previous attempts to erect budgetary standards have assigned a specific amount of fuel and light as a minimum—such, for instance, as one ton of coal per room per year. This method, however, is not very satisfactory, especially in a city like Washington, where apartment living is so prevalent. Therefore, in the present study it has seemed better to base the minimum on the usual expenditures for fuel and light, during the past year, by families housed according to the minimum housing standards here adopted and which were not extravagant in their use of fuel and light. By using this method the difficulty is avoided of trying to erect minimum quantity standards for various sizes and kinds of coal, and various lighting systems—gas, electricity, and kerosene. The choice among the articles usually does not depend upon the desire of the occupant, but upon the character of the house. * * *

IV. MISCELLANEOUS EXPENSES.

Upkeep of house furniture and furnishings..... \$70

The budget here prepared regards the initial furnishing of a house with the more durable articles of furniture as a matter which the prudent man and woman should attend to at the beginning of their

married life before they have the burden of a large family, and therefore as an expense which need not be counted in attempting to fix a living budget for a family when it is at its period of maximum expense.

However, the upkeep of house furnishings, such as bedding, towels, and kitchen and table ware, and also the replacement of worn-out furniture, is a necessary, recurrent expenditure. Investigation and study of existing data indicate that the cost of such upkeep approximates 6 per cent of the total value of the furniture and furnishings of the usual household of persons in moderate circumstances.

A special investigation was made by agents of the Bureau of Labor Statistics to determine the minimum amount of furniture and furnishings necessary for a small house or apartment. Prices on this minimum amount were secured from Washington stores in August, 1919, and found to total \$1,083. Even with the closest economy in buying, including the purchase of some second-hand furniture, this total could not well be reduced below \$1,000. For annual upkeep 6 per cent of this amount, or \$60, would be necessary. About \$10 or \$11 a year additional is required for gas mantles or electric bulbs, curtains, and a few other articles which could not be estimated quantitatively. This would make the total minimum annual expenditure for upkeep of house furnishings \$70.

Laundry work, assistance with washing, 1 day per week..... \$104

In the family of five used as a basis in the present budget estimates, the wife is presumed to do the cooking for the family, to do the cleaning of the house or apartment, to make most of the simpler garments worn by herself and the children, to keep all clothes in repair, to care for the children, and to do the marketing. It would seem unreasonable to expect that in addition she should do the laundry work entirely unassisted. Therefore, this budget has allowed for the assistance of a person for one day each week and \$2 per day seems to be the prevailing rate in Washington for service of this kind.

Cleaning supplies and services..... \$32.92

The following seems to be the minimum requirement of cleaning supplies and services to insure personal and household cleanliness. (Mops, brooms and brushes are included under furnishings.)

Cleaning supplies and services	Unit price.	Quantity.	Total cost.
Personal:			
Toilet soap, small bar Ivory.....	\$0.07	70	\$4.90
Toothbrush.....	.25	5	1.25
Toothpaste, tube or box.....	.25	12	3.00
Combs, hard rubber.....	.50	1	.50
Hairbrushes.....	1.50	½	.75
Shoe polish, box.....	.15	6	.90
Barber's services:			
Husband, hair cut.....	.50	12	6.00
Children, hair cut.....	.40	8	3.20
Household:			
Laundry soap, ½-lb. bar.....	.06	120	7.20
Starch, pound.....	.07	6	.42
Cleanser, box.....	.05	36	1.80
Unspecified cleaning supplies and services, such as borax, ammonia, washing powder, bluing, insect powder, etc.....			3.00
Total.....			\$32.92

Health \$80

Some allowance must of course be made for the maintenance of health. This expenditure includes physician, dentist, oculist, glasses, and drugs, both prescriptions and prepared remedies.

No definite number of visits to the doctor can be assumed as necessary, but aside from the occurrence of major illnesses, colds and the various diseases of childhood will doubtless make a doctor's services necessary at some time during the year. Not only will this item have to provide for prescriptions, but also for the various family remedies.

At least one visit to the dentist during the year for three members of the family will be necessary, and rarely does one visit prove sufficient.

In the absence of any known quantitative measurement, it has been felt that the most accurate figure will be the average amount spent by families of Government employees.

A special investigation of the expenditures of 64 families during the year ending July 31, 1919, shows the average expenditure for doctor, dentist, oculist, and other items necessary for the maintenance of health to have been \$90.37. The year covered by these expenditures, however, included the "flu" epidemic of last autumn and winter, which undoubtedly added to the average expense of medical attention and medicine. For this reason it has seemed reasonable to fix the health allowance in this budget at \$80.

Insurance: (a) Life, \$5,000 ordinary policy, yearly premium..... \$110

It is a generally accepted fact that the male head of a family should carry insurance on his life to protect his wife and children in the event of his death. In order to do this it is necessary that the yearly income be sufficient to meet the yearly insurance premiums. The only question would seem to be as to the amount of insurance which should be carried. It would seem that a \$5,000 policy would be the minimum for protection and safety. In the event of the husband's death this would assure an income to the wife and children of not over \$300 per year, or \$6 per week. * * *

Insurance: (b) Furniture..... \$1.50

Furniture insurance is a cheap form of insurance which it is highly important that every family should carry, as the loss of household equipment is an extremely serious matter to a family of low income. Inquiry made of the Underwriters' Association of the District of Columbia shows that the premium on \$100 worth of furniture (in a brick house) is 15 cents per year when paid for a period of five years.

Insurance on \$1,000 worth of furniture, which would be about the average value of furniture of the type of family had in mind in this study, would be \$1.50.

Car fare, 900 rides..... \$45

There are many Government employees in Washington who live so near their offices that car fare is an expense that need rarely be incurred. On the other hand, the large area covered by the city and its suburbs makes it absolutely necessary for a considerable portion of the employees to ride to and from their work, and for another portion to ride at least a part of the time. In view of this, it seems reasonable to allow the husband two car rides per day for each working day, or 600 rides in total.

Approximately three trips per week on the street car have been allowed for the wife and children. Local open markets within easy walking distance are available to comparatively few families in Washington, and many who walk one way must take a car home after the market basket has been filled. In addition to this, the mother of three children will need to make occasional trips to the stores in the central part of the city to purchase clothing for the family, and it will be necessary usually for her to take with her the 2 and 5-year-old children, involving two car fares. It is assumed that the children will be able to walk to and from school.

Computation of the cost of street car fare has been made on the

basis of the 5-cent fare, as no reliable data exists as to the use of transfers, for which a charge of 2 cents is made in Washington.

Amusements and recreation..... \$20

The importance of recreation as a factor in healthy living need not, of course, be emphasized. It is accepted as an everyday fact. The only question is as to the character and cost of such recreation. Much wholesome amusement arises naturally within the circle of a family and its friends and costs nothing. On the other hand, the complexity of modern city life places a money price on many simple and desirable forms of amusements. Thus a picnic for a family, or a visit to the park, involves a considerable item of car fare, while a trip on the river will cost a dollar or more. Moreover, occasional visits to the moving pictures are to be expected of at least some members of a family. Thus, even though the more expensive forms of amusement and recreation, such as summer vacations, are eliminated, some expenditures for this item are absolutely necessary if a family is not to lead a completely isolated life.

It is impossible, however, to establish quantity standards for amusements and recreations. The most reasonable method would, therefore, seem to be to use as a guide the average amount expended by families of Government employees. A special investigation of expenditures of 64 families of Government employees in Washington shows that their average expenditure for amusements and recreation during the year ending July 31, 1919, amounted approximately to \$20. On the average these families had expended a similar amount on vacations, but no allowance for vacation has been made on this budget.

Newspapers1 daily newspaper, \$3.40

A newspaper, daily and Sunday issues, is placed in the budget because it is desirable that every citizen should read a daily paper. In addition, the modern newspaper offers a variety of literary and educational features at a minimum expense.

No allowance is made for magazines or books, not because the reading thereof is not desirable, but because a family, forced to careful economy, may avail itself of the public libraries for all forms of literature.

The yearly subscription rates of the Washington newspapers vary slightly, with \$3.40 as the minimum. It is felt that the maximum should be allowed in order to permit the reader his choice of newspapers.

Organizations, such as the church and labor unions, play such an

important part in the life of the average worker and his family that some expenditure on this account must be regarded as essential to normal living. In the present budget expenditures for this purpose are accepted as necessary for the majority of families only in the case of the church and labor organizations; membership in other organizations, such as the Red Cross Society, the Young Men's Christian Association, and social clubs may be very desirable, but cannot be regarded as necessary for a family with low income.

(a) Church and other religious organizations..... \$12

Membership in, or regular attendance at a church almost compels contributions in one form or another. Not to be able to contribute usually makes the individual feel so "uncomfortable" that he feels unwilling to attend church or to send his children to Sunday school. Just what the minimum desirable contribution should be is difficult to determine. In any case, a family contribution of 25 cents a week would seem to be a bare minimum.

(b) Labor organizations..... \$10

Membership in a labor organization always involves contributions to its support in the form of dues. The amount of these dues varies according to the organization. The craft unions to which many employees in the navy yard and other mechanical divisions belong have as a rule considerably higher dues than the clerical workers' organizations. In the absence of other data, it would seem that the most reasonable method of arriving at a minimum allowance for this purpose would be to use as a guide the average amount actually paid for labor organization dues by Government employees. An investigation on this point showed the average expenditure on labor organizations by 64 families of Government employees in Washington during the past year to have been \$10.08.

Incidentals \$52

In addition to the expenditures listed above there are a large number of other items, mostly small or occasional, which cannot be entirely avoided by a family—such, for instance, as moving expenses, burial expenses, stationery and postage, telephoning or telegraphing at times, patriotic contributions, and charity. Also a few minor comforts—such, perhaps, as tobacco—are almost in the category of necessities for certain people. No minimum quantities for these items can possibly be specified. The only solution is to grant a modest sum of money as a maximum to cover expenditures for all incidentals.

The amount granted by this budget is \$1 per week.

III

BUDGET FOR BITUMINOUS COAL MINE WORKERS, 1920

Prepared by WM. F. OGBURN.

At the request of the United Mine Workers of America, Professor Wm. F. Ogburn of Columbia University drew up and submitted to the Bituminous Coal Commission, in January, 1920, a quantity and cost budget specifically for bituminous mine workers. The following condensation of the original memorandum has been approved by Professor Ogburn:

The quantity budget worked out by the United States Bureau of Labor Statistics in August, 1919, has been priced in certain coal-mining regions, the theory being that what is a standard of health and decency for families of Government employees should in its main outlines also be the standard of health and decency for families of mine workers. The prices of the various items may be different in coal-mining centers in 1920 from the prices in Washington in 1919. There may also be some variation in the standard; the miners need more food and their clothing requirements are different. But the main purpose borne in mind was this—to determine a standard of living in coal-mining communities necessary for health and decency, based on a determination of this standard by the Bureau of Labor Statistics for Washington, D. C.

The prices used in making out the cost here submitted were obtained by the United States Bureau of Labor Statistics. That Bureau already had in its possession considerable data regarding prices in certain mining towns, but, in order that the data might be entirely up to date, the Bureau was requested, through the Secretary of the Commission, to make a supplemental inquiry. The request was granted, and agents were sent out. In view of the very short time available, however, the investigation had to be limited to two districts. One of these was the Uniontown district, south of Pittsburgh; the other was the community of Pana, Ill.

It is, of course, realized that these two localities are not a very large sample and may not be adequately representative of the coal-mining districts. In making up the budget, therefore, a slavish following of averages of the prices obtained has not been adhered to, but considerable consideration has been given to the question of the accuracy of the sample.

In judging the adequacy of the data obtained, for instance, it is clear that the information relating to house rents secured from

the Uniontown and Pana districts would not be entirely satisfactory. This would also be true of street car fare. More representative data would also be needed in determining prices paid for coal, gas, electricity, and certain other items.

The budget estimates, therefore, have not been based solely upon the Pana and Uniontown material. Fortunately, in the files of the Bureau of Labor Statistics there are a good many family schedules showing prices and quantities as of the year 1918 in a number of small towns in those districts. The Bureau of Labor Statistics has very kindly put these records at our disposal, and from these data it was possible to formulate a fair idea of general conditions in such matters as street car fare, house rents, gas and electricity prices, which could not have been derived from the information secured in the two localities only.

The estimate of the standard of living as here submitted has, therefore, been made possible—

First, by using a previously determined standard of health and decency;

Second, by immediate field investigations in two mining communities, and,

Third, by using records previously collected by the Bureau of Labor Statistics from a much larger number of centers in the coal fields.

SUMMARY OF BUDGET.

Following the methods of computation above outlined, the following results are obtained as to the cost of maintaining a miner's family at a level of health and decency, at prices now prevailing (i. e., December, 1919).

Food (when computed on the basis of the husband being engaged in light work).....	\$768.60
Additional food needed when husband is engaged at heavy work.....	32.78
Clothing:	
Husband	\$146.81
Wife	130.92
Boy, 11 years.....	77.40
Girl, 5 years.....	66.13
Boy, 2 years.....	34.00
	<hr/> 455.26
Rent	216.00
Fuel and light.....	70.00
Miscellaneous	576.30
	<hr/> \$2,118.94
Saving on garden, chickens, etc.....	15.00
	<hr/> \$2,103.94
Explosives, smithing, etc.....	40.00
	<hr/> \$2,143.94
Total.....	

ITEMIZED DETAILS OF BUDGET.

For a family of five in two bituminous mining towns (Pana, Ill., and Uniontown, Pa.).

I. FOOD.

Item.	Cost per Item.	
	Annual.	Weekly.
Meat	\$134.86	\$2.59
Fish	22.29	.43
Dairy products.....	155.38	2.99
Lard	12.48	.24
Eggs	46.97	.90
Cereals	130.50	2.52
Starch group.....	.89	.02
Sugar group.....	44.88	.86
Fruits, fresh.....	42.33	.81
Fruits, dried.....	8.89	.17
Fruits, canned.....	4.32	.08
Vegetables, fresh.....	87.31	1.68
Vegetables, dried.....	6.35	.12
Vegetables, canned.....	5.85	.11
Vegetable oil.....	8.68	.17
Miscellaneous vegetable food.....	5.86	.11
Mixed fats.....	9.84	.19
Miscellaneous items.....	28.92	.56
Ice	12.00	.23
Total.....	\$768.60	\$14.78

II. CLOTHING.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Husband.			
Hat, felt.....	\$4.00	$\frac{1}{2}$	\$2.00
Hat, straw.....	2.75	1	2.75
Suit, winter wool.....	40.00	$\frac{1}{2}$	20.00
Suit, summer wool.....			
Overcoat	35.00	$\frac{1}{4}$	8.75
Raincoat	12.25	$\frac{1}{2}$	2.04
Shirts, cotton.....	1.75	5 work	8.75
	2.00	1 dress	2.00
Union suit, summer.....	1.75	3	5.25
Union suit, winter.....	3.75	2	7.50
Pajamas	1.50	1	1.50
Socks, cotton.....	.50	8	4.00

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Socks, wool	\$0.75	4	\$3.00
Shoes:			
High, work	5.00	4	20.00
Low, dress	5.25	$\frac{1}{2}$	2.63
Shoe repairing:			
Half soles and heels	2.00	2	4.00
Rubbers	1.25	$\frac{1}{2}$	.63
Gloves, leather work	1.25	3	3.75
Collars . . . . .	.25	6	1.50
Ties . . . . .	.75	2	1.50
Handkerchiefs . . . . .	.20	8	1.60
Garters . . . . .	.35	2	.70
Belt . . . . .	.75	$\frac{1}{2}$	.38
Suspenders . . . . .	.75	1	.75
Umbrella (cotton)	1.75	$\frac{1}{2}$	.58
Cleaning and pressing	1.25	2	2.50
Miscellaneous . . . . .	....	...	3.00
Special:			
Work trousers	3.00	3	9.00
Overalls	2.50	4	10.00
Jumper	2.75	2	5.50
Miner's cap . . . . .	.50	2	1.00
Arctics	1.75	1	1.75
Sweater	8.50	1	8.50
Total			\$146.81

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Wife.			
(Summer Clothing)			
Hat	\$7.25	1	\$7.25
Wash Skirt	3.00	$\frac{1}{2}$	1.50
Waist (cotton) made at home	1.75	3	5.25
Waist, dress	5.25	$\frac{1}{2}$	2.63
Dresses (cotton, thin) made at home	2.70	2	5.40
Underwear (union suits)	1.13	3	3.39
Petticoat, muslin	1.50	1	1.50
Shoes, low	5.50	1	5.50
Gloves, cotton . . . . .	.75	1	.75
(Winter Clothing)			
Hat	8.75	$\frac{1}{2}$	4.38
Suit	37.50	$\frac{1}{2}$	18.75
Dress, wool serge	25.00	$\frac{1}{2}$	12.50
Coat, wool	37.50	$\frac{1}{2}$	12.50

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Petticoat, dark cotton.....	\$1.50	1	\$1.50
Underwear (union suit, heavy cotton).....	2.75	1	2.75
Shoes, high	8.50	1	8.50
Gloves, kid	2.50	$\frac{1}{2}$	1.25
(Year-Round Clothing)			
House dresses	2.75	2	5.50
Apron, kitchen .....	.60	1	.60
Corset (standard make).....	2.75	1	2.75
Corset covers .....	.75	3	2.25
Brassiers .....	.50	2	1.00
Nightdresses	2.00	2	4.00
Kimona	2.00	$\frac{1}{2}$	1.00
Stockings, cotton .....	.40	8	3.20
Shoe repairing:			
New heels .....	.35	3	1.05
Half soles and heels	1.25	1	1.25
Handkerchiefs .....	.20	8	1.60
Umbrella	2.00	$\frac{1}{2}$	.67
Rubbers or arctics	1.25	1	1.25
Cleaning and pressing.....	1.50	1	1.50
Miscellaneous .....	....	..	8.00
Total.....			\$130.92

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Boy—11 years of age.			
Caps or hats.....	\$0.90	2	\$1.80
Suit, wool.....	10.50	1	10.50
Pants, separate (part wool).....	2.50	1	2.50
Pants, separate, summer.....	1.75	2	3.50
Overcoat	13.50	$\frac{1}{2}$	6.75
Overalls	1.50	1	1.50
Shirts or blouses, cotton.....	.90	5	4.50
Summer underwear or union suit.....	1.25	3	3.75
Winter underwear or union suit.....	1.50	2	3.00
Pajamas	1.25	2	2.50
Stockings .....	.50	12	6.00
Shoes:			
High	3.50	3	10.50
Low	2.50	2	5.00
Shoe Repairing:			
Half soles and heels.....	1.50	5	7.50

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Rubbers	\$1.00	1	\$1.00
Gloves or mittens . . . . .	.75	2	1.50
Collars . . . . .	.25	3	.75
Ties . . . . .	.50	2	1.00
Handkerchiefs . . . . .	.10	6	.60
Garters . . . . .	.25	2	.50
Belt . . . . .	.50	$\frac{1}{2}$	.25
Miscellaneous			1.00
Sweater	3.00	$\frac{1}{2}$	1.50
Total			\$77.40

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Girl—5 years of age.			
Hat, summer	\$4.00	1	\$4.00
Cap, stockings . . . . .	.90	1	.90
Dresses, cotton	1.30	6	7.80
Dresses, wool	3.50	$\frac{1}{2}$	1.75
Hat, winter	4.00	$\frac{3}{4}$	1.60
Apron . . . . .	.60	1	.60
Coat	11.25	$\frac{1}{2}$	5.63
Sweater	4.00	$\frac{1}{2}$	2.00
Cotton petticoats:			
Muslin	1.00	2	2.00
Outing flannel . . . . .	.90	1	.90
Summer underwear:			
Union suits . . . . .	.90	4	3.60
Underwaists . . . . .	.50	4	2.00
Winter underwear:			
Union suits	1.25	2	2.50
Night dresses:			
Muslin . . . . .	.90	1	.90
Outing flannel . . . . .	.90	1	.90
Stockings, cotton . . . . .	.40	12	4.80
Shoes:			
High	3.50	3	10.50
Low	3.00	3	9.00
Rubbers . . . . .	.75	1	.75
Mittens . . . . .	.50	1	.50
Handkerchiefs . . . . .	.10	6	.60
Garters . . . . .	.20	2	.40
Miscellaneous			2.50
Total			\$66.13

II. CLOTHING—Continued.

Article of clothing.	Unit price.	Replacement per year.	Yearly cost.
Boy—2 years of age.			
Hats or Caps:			
Hat, duck.....	\$0.65	1	\$0.65
Cap .....	.75	1	.75
Dresses, cotton (suits, overalls, rompers) ..	.70	8	5.60
Overcoat	6.00	$\frac{1}{2}$	3.00
Sweater	3.00	$\frac{1}{2}$	1.50
Summer Underwear:			
Undershirts .....	.50	3	1.50
Drawers, muslin.....	.50	3	1.50
Underwaists .....	.50	4	2.00
Winter Underwear:			
Undershirts .....	.75	2	1.50
Drawers .....	.75	2	1.50
Night Dresses:			
Muslin .....	.75	1	.75
Outing flannel.....	1.00	1	1.00
Stockings and socks, cotton.....	.35	10	3.50
Shoes:			
High	2.25	2	4.50
Low (sandals).....	1.50	2	3.00
Mittens .....	.35	1	.35
Garters .....	.20	2	.40
Miscellaneous			1.00
Total.....			\$34.00

III. HOUSING.

Rent	\$216.00
Fuel and light.....	70.00
Total.....	\$286.00

IV. EXPLOSIVES, TOOLS AND SMITHING.

Cost of explosives, per year.....	\$120.00
Mine lamp (maintenance per year)	10.00
Smith charges, per year.....	10.00
Total.....	\$140.00

V. MISCELLANEOUS.

Upkeep of house, furniture and furnishings.....	\$70.00
Laundry work and assistance in domestic service.....	100.00
Cleaning, supplies and services.....	33.00
Health	80.00
Insurance:	
(a) Life (disability)	138.80
(b) Furniture	1.50
Carfare	15.00
Amusements and recreation.....	20.00
Newspapers, magazines and books.....	13.00
Organizations:	
(a) Church	13.00
(b) Fraternal	10.00
(c) Labor	30.00
Incidentals	52.00
Total.....	<u>\$576.30</u>

REMARKS ON THE ITEMS OF THE BUDGET.

I. Food.

Food requirements have been the most carefully and accurately studied of any of the needs of man, and since food constitutes the largest single item in the budget, it is of great importance to get the food estimates as accurate as possible.

The most common unit for the measurement of food is the calorie, which is a unit of energy. Food is energy to the human machine just as coal is energy in the furnace. A man of average age, weight and stature, at moderate muscular labor, is supposed to need approximately 3,500 calories a day. If 3,500 calories a day are purchased, probably 10 per cent will be wasted before eaten, and perhaps a small percentage as actually consumed will not be utilized by the system, so that out of the 3,500 calories as bought probably only 3,100 will actually be used by the body.

The food needs of the family are estimated in like proportion, a woman consuming 0.9 as much as a man, a boy of eleven 0.9, a girl of five 0.4, and a boy of two 0.15. The food budget used in the Washington study for a Government clerk's family is calculated to produce 3,500 calories per man per day for a family of this size. This is hardly adequate for a miner, as his work involves the expenditure of more energy, doubtless, than the man engaged in average muscular activity.

There seem to be no records available as to the calorie needs of coal miners. Records made in the training camps of the United States prior to transportation overseas show that the men consumed, in the summer, about 3,700 calories and in the winter 3,900. Men working in logging camps, at felling trees in the cold and in the open, consume as high as 6,000 calories. It is apparently quite conservative to add 500 calories per day to the food requirements of a clerk in Washington, as exemplified in the accompanying dietary, to arrive at the food requirements of a miner. This would mean 4,000 calories in the food purchased for the miner, which would have to be reduced somewhat, on account of waste, to arrive at the actual amount consumed, it being remembered, of course, that the miner will not work, on an average, six whole days a week.

The food budget presented here is an average dietary made up from different sections of the country and is, therefore, not peculiar to any one district or locality. It seems to be in a good many ways a desirable standard to price in minimum quantities. Perhaps a

single mining community may have peculiarities of diet, but if the diets in all of the mining communities of the United States could be collected, very probably they would average out in very nearly the proportions found in the accompanying dietary, which is really an average of dietaries from various parts of the country. There may be in the dietary certain articles, such as watermelon or sour-kraut, which may not be used in a particular group of miners' families, but it is thought that the amount of these special types of food allotted in this dietary is so small that it does not invalidate its applicability. In other words, the great bulk of the dietary is made up of staples used probably in all communities.

It should be remembered that this food budget is a standard of what is desirable. It is really almost imperative, for the best health, in families where there are children, that 12 ounces of milk should be consumed per man per day. It may be true in some of the mining communities they do not consume as much milk as this, but in a case of this sort the standard dietary should not be bound to the standards of local consumption, for nearly all food experts insist upon the desirability of milk as an article of diet.

The prices of the quantities of food here listed were obtained from stores in the localities visited by the agents during the latter part of January, 1920. Prices were secured from four or five stores in each town and averaged. No single quotation was used. The prices are, therefore, actual prices. In some cases the prices determined at this time of the year may not be strictly accurate, but it is thought that the error is not very large for the year as a whole. In some cases, as it was impossible to price a particular article in the community, the prices furnished by the Bureau of Labor Statistics from other places were used.

II. CLOTHING.

There are certain measurements in food studies that make objective tests of adequacy more accurate than in clothing. The standard of clothing for health and decency, as worked out in the study of the United States Bureau of Labor Statistics previously referred to, was the result of painstaking study and a considerable amount of investigation. In estimating the standard of clothing, the Bureau of Labor Statistics made use of its tabulations of clothing purchases by a very large number of families in a great many cities, scattered widely over the country.

It is presumed that the wife does a considerable amount of sewing

for the children, and the prices of a great many of the children's clothes are based upon the cost of material alone. The purpose in making this study was to set certain standards, particularly of decency, and this was arrived at after a great amount of observation and consultation.

The quantities listed in the budget are for annual replacements, and it has been assumed that the amounts listed will be supplemented by the "hold-over" of similar garments from the previous year. In the case of a garment which may reasonably be expected to last over a period longer than one year, the annual amount has been expressed in a fraction, i. e., a coat to be worn two years is $\frac{1}{2}$, 3 years, $\frac{1}{3}$, etc.

This standard budget of clothing was priced at several stores in each community visited, and the prices are therefore actual prices of goods and clothing available for purchase in these particular localities.

The quantities of clothing required were varied slightly for miners as contrasted with residents of Washington, D. C., due to the peculiar needs of miners. The miner wears more overalls and is considerably harder on shoes. He is a great deal in the damp and his clothes come in contact with the floor and sides of the mine, so that he has certain special requirements.

In some few cases the types of woolen goods priced in the stores seem to be considerably less in price than such articles would cost in Washington, and very probably there may be some difference in quality, but this is rather difficult to measure. It seems nearly impossible, therefore, to keep the present clothing standard identical with that of the Washington study, but it is not believed that the variation is very great.

III. HOUSING, FUEL AND LIGHT.

The minimum housing standard for a family of five has been taken as one of four rooms, bath, inside toilet and running water. Communities are observed to vary in the types of houses rented. Some communities will have practically no four-room houses and all five-room; others may have no five-room houses and all four or six-room houses, so that it seems slightly arbitrary to set the number of rooms too rigidly in a standard.

Houses also vary a great deal in rent, according to whether they are new or old houses. They differ also according to the size of the community. A budget, to be most adequately applicable, therefore,

should have the item of rent somewhat variable. In other words, when the budget is applied to one town, the rent may be fixed at a certain figure, and when applied to another locality the item of rent may be determined at a different figure. In some of the suburbs of Pittsburgh the rent is quite high, running up to \$25 or \$35 a month, whereas the rent for some company houses in very small mining communities might drop as low as \$12. Judging from the rent schedule collected by the Bureau of Labor Statistics in a large number of towns, very probably a four or five-room house, with running water, bath and toilet would cost from \$18 to \$20, roughly averaged, although perhaps a newcomer in the town might not be able to get such a house for less than \$25.

In some very small mining towns, where the company owns the houses, it is possible to get a four-room house for a figure as low as \$7 or \$8 a month, but this house will not meet the standard requirements of health and decency, being without bath, inside toilet or running water. In other communities it is possible to rent a fairly substantially built house of five rooms for \$12, but such a house may be without running water, and thus would not come up to the standard. If the house with five rooms is modern and has certain other features of modern equipment, such as gas and electricity, the rent will very likely be around \$25 or \$30, so that a figure of \$18 a month for rent for the standard type house compatible with health and decency is fairly conservative.

FUEL.

Miners' families usually burn about 12 or 13 tons of coal a year, somewhat more in this regard than perhaps the average family. This may be due in part to the fact that the coal is purchased more cheaply, in part to the fact that much cooking is done with coal, and perhaps in part to the fact that the houses are exposed on all sides. Also the use of grates and single stoves causes a greater waste of heat than does a furnace.

The coal is usually purchased by miners, with the exception of certain communities, at somewhat cheaper prices than others have to pay. It is difficult to set exact figures, owing to the fact that the price depends upon local practices. Some mining companies, indeed, have furnished coal free, charging only for the cost of hauling. Coal will also vary in price according to grade. But it is thought that an estimate of \$4 per ton is a fair average figure, taking into consideration these variable elements.

Fuel used for cooking also varies quite widely. A great many families cook with coal and some with gas, whether natural or manufactured, and some families use a little of both. If gas is used for cooking alone, perhaps 25,000 or 30,000 cubic feet is the average amount used. This varies in price from 75 cents to \$1.50 per thousand.

Lighting by a great many families in mining towns is furnished by kerosene. Families using this will probably consume 50 gallons a year, or more, which sells now around 20 cents a gallon. In case electricity be used for lighting, perhaps 200 kilowatt hours may be consumed. Monthly minimums are often set by the companies, varying from \$1 to \$1.50.

The type of fuel used for cooking and lighting is determined, to a certain extent, by the kind of house occupied. If the house be a sanitary one, with modern equipment, very likely gas and electricity are found. If gas be used for cooking, perhaps not quite so much coal will be consumed.

It is very difficult to set a single figure for lighting and heating where customs and habits are so varied and where the climatic conditions also fluctuate. However, it is thought, judging from the family expenditures observed, that \$70 for fuel and light, including matches, kindling, etc., would be a fair figure.

IV. EXPLOSIVES, TOOLS AND SMITHING.

A large number of the miners are required to pay out of their wages a certain sum for explosives, equipment and maintenance of tools. In some instances the company pays for the explosives, so a budget to be adapted to a particular community would have to be varied in this item for the cost of explosives and supplies. But because of the fact that such a large number of miners must pay for these, the items of \$120 for explosives, \$10 for the mine lamps and supplies and \$10 for tools and smithing, being a total of \$140. is listed.

V. MISCELLANEOUS.

Upkeep of House, Furniture and Furnishings.

The following data does not allow for the initial furnishing of a house with the more durable articles of furniture. However, the upkeep of house furnishings, such as bedding, towels, kitchen and table ware, and also the replacement of worn-out furniture, is a necessary recurring expenditure. The amount allowed in the stand-

ard budget by the Bureau of Labor Statistics is \$70, and is the estimate used for this study. It is thought that furniture costs in mining towns are not exceptional.

Assistance in Domestic Service.

In the standard of health and decency worked out for Washington, D. C., provision is made for some assistance to the housewife. If the housewife has three dependent children, does the cooking for the family and does some of the laundry work and the bulk of sewing for the children, it is very probable that she will need some assistance in all of this work. Some mothers may get assistance in the laundry work, others may have a seamstress come in, and in various ways personal service of this nature is required. It would seem that \$100 a year for such assistance would probably conform to standards of health and decency.

Cleaning Supplies and Service.

The item for certain cleaning supplies and service is listed at \$33, and is, in detail, the same as that adopted in the Washington, D. C., budget.

Maintenance of Health.

The item for the maintenance of health is put down as \$80. Some years ago it was estimated for the country as a whole at \$60, which included doctors' fees, hospital services, medicines, dentists' fees and oculists' fees, eyeglasses, etc. These prices have gone up somewhat, and the figure of \$80 is probably conservative. There is certainly no reason to believe that the health conditions in mining towns and of the miners' work are better than in other communities and in other lines of work.

Insurance.

In the standard of health and decency it is estimated that the head of the family should carry an ordinary life policy of \$5,000. It is a fact that a great many working men carry only industrial insurance, but it would certainly seem that it is not asking too much that a man at death should leave a \$5,000 policy as a minimum of protection and safety, even though in special cases of death by accident there may be special compensation.

A good many insurance companies will not write an ordinary life

insurance policy for miners; others will only write them endowment policies. There are some companies, however, that do write ordinary life insurance for miners. The companies which have the cheapest rate for miners, as contrasted with other risks, charge at least 10 per cent more for miners than for the ordinary workman. The best price quoted by one company of excellent standing was \$27.76 per thousand for miners, which amounts to \$138.80 per year for a \$5,000 policy. The rate of this company has been raised since last summer.

The item for the insurance of furniture, which seems desirable, is set down at \$1.50.

Carfare.

The amount allowed for carfare varies from locality to locality. In a great many mining communities a very large percentage of the miners do not pay carfare to their work and back. In some towns, however, there is some use of the street cars in going to and from work. In the small towns where there are no street cars, sometimes the item of car rides consists in visits to nearby towns for shopping or pleasure purposes, and in such cases an item is sometimes put down for the wife and children. It is assumed that in practically all cases the children walk to and from school.

The most satisfactory way of estimating the items of carfare would be to vary it according to the community to which the budget is applied, but if a single item is desired, as an average, probably \$15 should properly be placed.

Amusements and Recreation.

In earlier budgets the necessity for amusements and recreation was not appreciated. The rise of modern psychology, however, has demonstrated their necessity. An item of \$20 for amusement and recreation, which included theatres, movies, pool, dances, etc., seems very modest, indeed, and is the figure used in the budget of the Bureau of Labor Statistics.

Newspapers, Books and Magazines.

A family living at a level of decency and health should certainly have a newspaper daily and Sunday. It is, in fact, a necessity of citizenship. Inhabitants of small towns usually enjoy a paper from a larger city, and occasionally a subscription to a local paper. It is thought that the sum of \$9.00 would cover the cost of newspapers in the average community.

Only \$4.00 a year is allowed for books and magazines. Very many

of the mining towns have no public libraries, and there the inhabitants, if they care to read, are forced to buy more of their literature than is necessary in larger cities.

Organizations.

Records of family budgets indicate that \$10 or \$15 a year are spent on religious organizations. In this budget \$13.00 has been allowed for such expenditures.

Ten dollars a year is allowed for fraternal organizations, and \$30.00 for labor unions. The trade-unions' dues are a little difficult to estimate, as there are a number of organizations to which the members contribute, and there are also occasional assessments. The rate also varies somewhat according to earnings, but it is estimated that \$30.00 will take care of the total annual contributions.

Incidentals.

There are also a number of additional expenditures, such as moving expenses, burial expenses, stationery and postage, occasional telephone and telegraph tolls, patriotic contributions and charity. A great many also use tobacco. The total of these probably amounts to \$1.00 per week on the average.

Variations in Family Budgets.

There always exist some families who can, by unusual thrift, luck or skill in purchasing, make some savings over a standard set for the ordinary household. It would seem, however, that a budget should not be set for such exceptional individuals. There will, of course, always be variations also in prices, so that by watching sales and taking advantage of exceptional opportunities there may be some saving made here and there.

It is quite possible that the families who have gardens and raise chickens do make some saving on food costs. This saving, as judged by a number of family budgets that have been collected, is estimated at \$15.00. Very probably the other savings would not amount to more than 5 per cent or 10 per cent. This budget is built rather for the normal family and is figured very closely as a minimum estimate of health and decency. The prices are really minimum prices for these quantities.

It should be remembered that such a budget is by no means an ideal one. There are no provisions for savings, other than insurance, none for vacation, and the miscellaneous expenditures are exceedingly modest.

IV

WORKINGMEN'S STANDARD OF LIVING IN PHILADELPHIA, 1919

STUDY MADE BY THE PHILADELPHIA BUREAU OF MUNICIPAL RESEARCH.

The full report was recently published by Macmillan Company, New York, under the title: Workingmen's Standard of Living in Philadelphia. A report by the Bureau of Municipal Research of Philadelphia, William C. Beyer in charge, Rebekah P. Davis and Myra Thwing, assistants.

The original study was made in 1918, and the prices cited were those of August, 1918. In November, 1919, the Bureau made a supplementary investigation to ascertain the cost of the same quantity budget at the prices then prevailing. The results of this later study were published in the bulletin of the Bureau, entitled "Citizens' Business," for December 4, 1919. The following extracts are from this bulletin:

REQUIREMENTS AND COST AT NOVEMBER, 1919, PRICES, OF A FAIR
STANDARD OF LIVING FOR A FAMILY OF FIVE, CONSISTING OF
PARENTS, BOY OF 13, GIRL OF 10, AND BOY OF 6.

Total Budget.

Classes of Expenditure.	Cost per Year at Nov., 1919, Prices.
All classes.....	\$1,803.14
Specified standard.....	1,490.20
Housing	300.00
Fuel and light.....	84.23
Food	674.30
Clothing	346.63
Carfare	35.40
Cleaning supplies and services.....	49.64
Unspecified standard—21% of cost of specified standard.....	312.94

DETAILS OF BUDGET.

Housing—annual rent.....\$ 300.00

 Two-story house, with six rooms, facing street; bathroom, including toilet, washstand and tub; laundry; furnace; and facilities for cooking and lighting with gas.

Fuel and Light.

	Unit	Price per unit	Annual quantity	Annual cost
Total.....				\$ 84.23
Coal, pea.....	ton	\$ 9.95	2½	\$ 24.88
Coal, stove.....	ton	12.30	2½	30.75
Gas	1000 cu. ft.	1.00	26	26.00
Matches	box of 500	.05	52	2.60

Feed.

	Unit	Price per unit	Annual quantity	Annual cost
Total.....				\$674.30
Bread and Cereals.....				\$121.88
Bread	16-oz. loaf	\$.08	988	\$ 79.04
Buns and rolls.....	24-oz. doz.	.25	52	13.00
Cakes, misc.....	lb.	.30	13	3.90
Cornmeal	lb.	.05	26	1.30
Cornstarch	16-oz. pkg.	.10	13	1.30
Flour, wheat.....	12-lb. bag	.86	13	11.18
Macaroni	12-oz. pkg.	.10	13	1.30
Oatmeal	lb.	.08	52	4.16
Rice	lb.	.15	39	5.85
Meats and Fish.....				\$115.96
Beef, equal parts of brisket, chuck and round	lb.	\$.25	286	\$ 71.50
Chicken	lb.	.42	26	10.92
Fish, fresh.....	lb.	.15	78	11.70
Fish, salt.....	lb.	.18	13	2.34
Pork	lb.	.30	65	19.50
Meat Substitutes.....				\$166.27
Beans, dried.....	lb.	\$.15	13	\$ 1.95
Cheese	lb.	.40	26	10.40
Eggs	doz.	.65	78	50.70
Milk, fresh.....	qt.	.14	728	101.92
Peas, dried.....	lb.	.10	13	1.30
Shortening				\$ 55.77
Butter	lb.	\$.77	26	\$ 20.02
Lard	lb.	.30	32.5	9.75
Oleomargarine	lb.	.40	65	26.00

Food—Continued.

	Unit	Price per unit	Annual quantity	Annual cost
Fresh Vegetables.....				\$ 82.80
Cabbage	2-lb. head	\$.10	30	\$ 3.90
Carrots	2-lb. bunch	.08	39	3.12
*Corn	doz. ears	.45	13	5.85
*Lettuce	4-oz. head	.10	13	1.30
Onions	lb.	.07	91	6.37
Potatoes, Irish.....	pk.	.54	78	42.12
Potatoes, sweet.....	pk.	.72	1	.72
Spinach	pk.	.48	4	1.92
*String beans.....	pk.	.80	4	3.20
*Tomatoes	pk.	1.10	13	14.30
Canned Vegetables.....				\$ 14.60
Corn	19-oz. can	\$.18	13	\$ 2.34
Peas	19-oz. can	.23	13	2.99
Tomatoes	19-oz. can	.18	52	9.36
Fresh Fruits.....				\$ 23.28
Apples	pk.	\$.90	13	\$ 11.70
Oranges	doz.	.60	19.5	11.70
*Peaches	pk.	.75	6.5	4.83
Dried Fruits.....				\$ 4.68
Prunes	lb.	\$.25	13	\$ 3.25
Raisins	15-oz. pkg.	.22	6.5	1.43
Sugars				\$ 30.42
Molasses	18-oz. can	\$.18	26	\$ 4.68
Sugar, granulated....	lb.	.11	234	25.74
Beverages				\$ 30.55
Cocoa	8-oz. can	\$.22	13	\$ 2.86
Coffee	lb.	.42	52	21.84
Tea	lb.	.45	13	5.85
Miscellaneous				\$ 22.85
Baking powder.....	2½-oz. can	\$.06	13	\$.78
Ice	25-lb. piece	.15	120	18.00
Pickles	8-oz. bottle	.16	26	4.16
Salt	4-lb. bag	.07	13	.91

*For this article the seasonal price was used.

Clothing.

	Price per article.	Annual quantity.	Annual cost.
Total.....			\$346.63
Husband.....			\$ 86.48
Caps, wool and cotton mixture, 30 per cent wool, lined or unlined.....	\$1.00	1	\$1.00
Hats, soft or stiff felt, medium grade.....	2.50	1/2	1.25
*Hats, cheapest straw, stiff brimmed.....	2.00	1/2	1.00
Sweaters, 60 per cent wool.....	6.50	1/2	3.25
Overcoats, overcoating, 40 per cent wool.....	20.00	1/2	6.67
Suits, cheviot or cassimere, 50 per cent wool....	20.00	1	20.00
Extra trousers, worsted face, cotton back.....	4.50	1	4.50
Overalls, denim.....	2.00	2	4.00
Working shirts, cotton flannel or flannelette.....	1.75	2	3.50
Working shirts, cotton shirting.....	1.50	2	3.00
Dress shirts, printed madras.....	2.00	2	4.00
Collars, stiff or soft washable.....	.25	6	1.50
Ties, silk and cotton four-in-hand.....	.75	3	2.25
Suspenders, cotton or hse elastic web.....	.50	1	.50
Belts, cheap leather.....	.65	1/2	.33
Handkerchiefs, cotton.....	.15	6	.90
Nightshirts (homemade), 5 yds. 36-inch muslin, thread and buttons.....	1.54	1	1.54
Nightshirts (homemade), 5 yds. 27-inch outing flannel, thread and buttons.....	1.79	1	1.79
Summer underwear, sets, Balbriggan.....	1.00	3	3.00
Winter underwear, sets, 25 per cent wool.....	2.00	1	2.00
Socks, common cotton.....	.20	12	2.40
Shoes, gun-metal welt.....	6.00	2	12.00
Shoe repairs, half-soled and heeled.....	2.00	2	4.00
Rubbers, storm.....	1.00	1	1.00
Gloves, knitted yarn, 75 per cent wool.....	.75	1	.75
Garters, cotton elastic web.....	.35	1	.35

* For this article the seasonal price was used.

Clothing—Continued

	Price per article.	Annual quantity.	Annual cost.
Wife			\$ 80.28
Hats, plain velvet, little trimming.....	\$ 3.00	$\frac{1}{2}$	1.50
*Hats, plain straw, little trimming.....	2.00	1	2.00
Coats, Kersey cloth, pile fabric, cheviot, or mixtures	18.00	$\frac{1}{2}$	9.00
Wash dresses (homemade), 6 yds. 36-inch percale or gingham, thread and buttons.....	2.13	$2\frac{1}{2}$	5.33
Suits, wool poplin or other material, 50 per cent wool	25.00	$\frac{1}{2}$	12.50
Skirts, serge, panama cloth or plaid mixtures.....	5.00	1	5.00
Shirtwaists (homemade), $2\frac{1}{2}$ yds. cotton voile or lawn, thread and buttons.....	1.00	3	3.00
Shirtwaists (homemade), $2\frac{1}{2}$ yds. 36-inch washable silk, thread and buttons.....	5.25	$\frac{1}{2}$	2.63
Petticoats (homemade), $3\frac{3}{4}$ yds. 36-inch muslin, cambric or sateen, thread and buttons.....	1.35	2	2.70
Corsets, standard make	2.00	1	2.00
Corset covers, cambric with narrow embroidered or lace edging .....	.40	2	.80
Summer underwear, cotton ribbed union suits.....	1.25	3	3.75
Winter underwear, winter weight cotton union suits	1.50	2	3.00
Nightgowns (homemade), 4 yds. 36-inch muslin or outing flannel, thread and buttons.....	1.34	2	2.68
Handkerchiefs, cotton .....	.10	6	.60
Gloves, cotton or chamolsett.....	.85	1	.85
Aprons (homemade), 5 yds. 36-inch figured percale or gingham, thread and buttons.....	1.78	3	5.34
Stockings, plain cotton.....	.30	9	2.70
Shoes, gun-metal welt	6.00	2	12.00
Shoe repairs, half-soled and heeled.....	2.00	1	2.00
Rubbers, storm .....	.90	1	.90
Boy, Age 12			\$ 74.65
Caps, wool and cotton mixture, 30 per cent wool, lined or unlined	\$ 1.00	$1\frac{1}{2}$	1.50
Hats, wool and cotton mixture.....	1.25	$\frac{1}{2}$	.63
Sweaters, 60 per cent wool.....	3.25	$\frac{1}{2}$	1.63
Overcoats, overcoating, 30 per cent wool.....	10.00	$\frac{1}{2}$	5.00
Suits, 60 per cent wool, cassimere, union cheviot, or suiting	10.00	$1\frac{1}{2}$	15.00
Extra trousers, 35 per cent wool, union cheviot...	1.75	1	1.75

* For this article the seasonal price was used.

Clothing—Continued.

	Price per article.	Annual quantity.	Annual cost.
Boy, Age 13—Continued.			
*Extra trousers, cotton khaki.....	\$ 1.50	2	\$ 3.00
Blouses (homemade), 2½ yds. 36-inch percale or gingham, thread and buttons.....	.95	5	4.75
Collars, stiff or soft washable.....	.25	2	.50
Ties, silk Windsor .....	.40	2	.80
Belts, cheap leather .....	.40	½	.20
Handkerchiefs, cotton .....	.10	6	.60
Nightshirts (homemade), 3½ yds. 36-inch muslin, thread and buttons.....	1.08	1	1.08
Nightshirts (homemade), 3½ yds. 27-inch outing flannel, thread and buttons.....	1.26	1	1.26
Summer underwear, sets, Balbriggan.....	.75	3	2.25
Winter underwear, sets, winter weight cotton, fleece-lined.	1.25	2	2.50
Stockings, cotton ribbed .....	.30	18	5.40
Shoes, gun-metal welt	4.50	4	18.00
Shoe repairs, half-soled and heeled.....	1.75	4	7.00
Rubbers, storm.....	.75	1	.75
Gloves, fleece-lined, cotton back.....	.75	1	.75
Garters (homemade), 1 yd. cotton elastic web....	.15	2	.30
Girl, Age 10.....			\$ 64.41
*Hats, tailored straw	\$ 1.75	1	1.75
Hats, velveteen or corduroy.....	1.50	1	1.50
Sweaters, worsted face, cotton back.....	3.50	1	3.50
Coats, cheviot, 50 per cent wool.....	7.00	½	3.50
Wash dresses (homemade), 4½ yds. 32-inch ging- ham or chambray, thread and buttons.....	1.70	8	13.60
Petticoats (homemade), 2 yds. 36-inch muslin and 2½ yds. lace or edging, thread and buttons....	.88	2½	2.20
Petticoats (homemade), 2 yds. 27-inch outing flan- nel, thread and buttons.....	.73	2	1.46
Drawer waists, muslin.....	.45	3	1.35
Drawers (homemade), 2 yds. 36-inch muslin, thread and buttons .....	.63	6	3.78
Union suits, cotton, fleece-lined.....	1.25	2	2.50
Nightgowns (homemade), 3 yds. 36-inch muslin and 1½ yds. lace or edging, thread.....	1.00	1	1.00
Nightgowns (homemade), 3 yds. 27-inch outing flan- nel, thread	1.07	1	1.07
Handkerchiefs, cotton .....	.10	6	.60
Gloves, fleece-lined, cotton back.....	.75	1	.75

* For this article the seasonal price was used.

Clothing—Continued.

	Price per article.	Annual quantity.	Annual cost.
Girl, Age 10—Continued.			
Stockings, cotton ribbed.....	\$0.30	12	\$3.60
Shoes, gun-metal welt.....	4.00	4	16.00
Shoe repairs, half-soled and heeled.....	1.60	2	3.20
Rubbers, storm.....	.75	1	.75
Garters (home-made), 1 yd. cotton elastic web...	.15	2	.30
Ribbons, 1-yd. 3-inch silk face.....	.25	8	2.00
Boy, Age 6.....			
	.....	..	\$40.81
Caps, wool and cotton mixture, 30% wool.....	\$1.00	1½	1.50
Sweaters, worsted face, cotton back.....	3.00	1	3.00
Overcoats, overcoating or union cheviot, 30% wool	8.00	½	4.00
Wash suits (home-made), 2½ yds. 36-inch percale			
or gingham, thread and buttons.....	.95	6	5.70
Ties, silk Windsor.....	.40	1	.40
Handkerchiefs, cotton.....	.10	6	.60
Nightgowns (home-made), 3 yds. 36-inch muslin,			
thread and buttons.....	.92	1	.92
Nightgowns (home-made), 3 yds. 27-inch outing			
flannel and buttons.....	1.07	1	1.07
Drawer waists, muslin.....	.45	3	1.35
Drawers (home-made), 1½ yds. 36-inch muslin,			
thread and buttons.....	.48	4	1.92
Union suits, cotton, fleece-lined.....	1.00	2	2.00
Stockings, cotton ribbed.....	.30	18	5.40
Shoes, satin calf, machine sewed or nailed.....	2.65	3	7.95
Shoe repairs, half-soled.....	1.60	2	3.20
Rubbers, storm.....	.75	1	.75
Gloves, fleece-lined, cotton back.....	.75	1	.75
Garters (home-made), 1 yd. cotton elastic web...	.15	2	.30

Carfare.

	Unit	Price per unit	Annual quantity	Annual cost
Total.....	....	....	....	\$35.40
Carfare of husband....	ride	\$0.05	604	\$30.20
Carfare of family.....	ride	0.05	104	5.20

Cleaning Supplies and Services.

	Unit	Price per unit	Annual quantity	Annual cost
Total				\$ 49.64
Personal				\$ 19.14
Toilet soap.....	small bar	\$.10	70	7.00
Toothbrush	brush	.25	5	1.25
Toothpaste or tooth-powder	tube or box	.10	12	1.20
Combs, hard rubber..	comb	.25	1	.25
Hairbrushes, wooden back	brush	.40	1/2	.20
Shoe polish.....	box	.12	12	1.44
Barber's services:				
Husband	shave and haircut	.50	10	5.00
Children	haircut	.35	8	2.80
Household				\$ 20.28
Laundry soap.....	1/2-lb. bar	\$.075	120	9.00
Starch	lb.	.10	24	2.40
Bluing	pt.	.15	12	1.80
Clothesline	yd.	.025	5	.13
Clothespins	doz.	.03	1	.03
Stove polish.....	box	.05	26	1.30
Furniture polish....	pt.	.42	2	.84
Cleanser	box	.06	36	2.16
Collars sent to laund.	collar	.05	52	2.60

Unspecified cleaning supplies and services — 26% of cost of specified requirements \$ 10.24

UNSPECIFIED STANDARD—21% of specified standard..... \$312.94

The "unspecified standard," it should be explained, covers those classes of expenditure in the household budget that do not lend themselves readily to expression in terms of actual goods and services. They are health; furniture and furnishings; taxes, dues and contributions; recreation and amusements; education and reading; insurance, and miscellaneous expenditures. It has been found by investigation, however, that all these classes combined normally constitute about 18 per cent of the total household expenditures of workingmen's families or equal about 21 per cent of the expendi-

tures included under the "specified standard." Hence the use of the method employed above in determining the amount of the unspecified standard.

COST OF LIVING AMONG WAGE-EARNERS IN FALL RIVER, MASSACHUSETTS, OCTOBER, 1919

STUDY MADE BY THE NATIONAL INDUSTRIAL CONFERENCE BOARD.

The full report was published by the National Industrial Conference Board, Boston, Massachusetts, as Research Report Number 22. The following is an extract of the portions of the report dealing with the quantity budget and its cost in October, 1919:

The following report summarizes the results of a study undertaken to determine the cost of maintaining a minimum American standard of living in Fall River, Massachusetts, in October, 1919, and also the cost of maintaining a somewhat more liberal standard. * * *

For the purpose of this study, the cost of living was estimated with reference to the needs of a man, his wife and three children under 14 years of age. No attempt was made to secure family budgets from representative wage-earners. Instead, the amount of food, clothing, fuel, heat, light and other items needed to meet the requirements of a decent standard of living was carefully estimated on the basis of several budget studies made by other authorities, and prices of these various items were obtained. Thus, while the final estimate of the money cost of maintaining a definite standard of living is not based on actual family expenditures, but rather is a hypothetical budget designed to maintain a hypothetical family at a specified standard, it should closely approximate the true conditions. In practice, expenditures for the different items in the budget may and undoubtedly will vary considerably to meet the needs or tastes of individual families, but although the sums allowed for the total cost of living may be distributed in a large variety of ways, the averages given are as nearly representative as any that can be reached. It should always be borne in mind, however, that the figures are averages, even though they include a large variety of data. * * *

COST OF LIVING IN OCTOBER, 1919.

Food.—To obtain the average cost of food, several budgets, including articles sufficient for a week's supply for a family of man, wife and three children, were used as a basis. From these were constructed food budgets designed to meet the requirements of a minimum standard and of one slightly above the minimum. * * *

TABLE 1—MINIMUM FOOD BUDGET FOR A WEEK.

Item and amount.	Cost, October, 1919.	Item and amount.	Cost, October, 1919.
Meat and Fish		Fruit	
2 lbs. flank	\$.32	3 qts. apples	\$.27
2 lbs. chuck . . . . .	.40	3 oranges . . . . .	.12
½ lb. bacon . . . . .	.21	4 bananas . . . . .	.15
1 lb. dried cod . . . . .	.20	½ lb. raisins . . . . .	.12
1 can salmon . . . . .	.27	1 lb. prunes . . . . .	.24
Dairy Products		Bread, Cereals, etc.	
1 doz. eggs . . . . .	.61	12 lbs. bread	1.28
1 lb. butter . . . . .	.66	2 lbs. flour . . . . .	.16
½ lb. oleomargarine or lard . . . . .	.18	1 lb. cornmeal . . . . .	.07
1 lb. cheese . . . . .	.41	1 lb. rice . . . . .	.16
14 qts. milk	2.10	1 lb. macaroni . . . . .	.16
Vegetables		3 lb. rolled oats . . . . .	.21
1½ pks. potatoes . . . . .	.77	3 lbs. sugar . . . . .	.33
3 lbs. carrots . . . . .	.12	1 pt. molasses . . . . .	.12
2 lbs. onions . . . . .	.13	Tea, Coffee, etc.	
3 lbs. cabbage . . . . .	.14	¼ lb. tea . . . . .	.15
2 lbs. dried beans . . . . .	.23	½ lb. coffee . . . . .	.23
1 can tomatoes . . . . .	.15	½ lb. cocoa . . . . .	.22
		Condiments . . . . .	.11
		Total weekly cost	\$11.00

TABLE 2—MORE LIBERAL WEEKLY FOOD BUDGET.

Item and amount.	Cost, October, 1919.	Item and amount.	Cost, October, 1919.
Meat and Fish		Fruit	
2 lbs. flank	\$.32	3 qts. apples	\$.27
1 lb. hamburg . . . . .	.25	½ doz. oranges . . . . .	.24
3 lbs. leg mutton . . . . .	.75	½ doz. bananas . . . . .	.23
½ lb. bacon . . . . .	.21	½ lb. raisins . . . . .	.12
1 lb. dried cod . . . . .	.20	1 lb. prunes . . . . .	.24
1 can salmon . . . . .	.27	Bread, Cereals, etc.	
Dairy Products		12 lbs. bread	1.28
1 doz. eggs . . . . .	.61	2 lbs. flour . . . . .	.16
1 lb. butter . . . . .	.66	1 lb. cornmeal . . . . .	.07
½ lb. oleomargarine or lard . . . . .	.18	1 lb. macaroni . . . . .	.16
1 lb. cheese . . . . .	.41	2 lbs. rolled oats . . . . .	.14
14 qts. milk	2.10	1 pkg. cornflakes . . . . .	.15
Vegetables		½ lb. tapioca . . . . .	.08
2 pks. potatoes	1.02	3 lbs. sugar . . . . .	.33
2 lbs. carrots . . . . .	.08	1 pt. molasses . . . . .	.12
4 lbs. onions . . . . .	.26	Tea, Coffee, etc.	
2 lbs. cabbage . . . . .	.09	¼ lb. tea . . . . .	.15
2 lbs. dried beans . . . . .	.23	½ lb. coffee . . . . .	.23
1 can tomatoes . . . . .	.15	½ lb. cocoa . . . . .	.22
		Condiments . . . . .	.17
		Total weekly cost	\$12.15

These food budgets have been arranged with due consideration for food values and variety, although, of course, the tastes of many families might require a somewhat different combination of articles. Nevertheless, it is probable that an adequate supply of food for an average family of five could be purchased in Fall River in October, 1919, for \$11 per week, while \$12.15 is sufficient to insure a somewhat more liberal diet. This would mean an annual expenditure for food of \$572 for the minimum standard and \$631.80 for the more liberal standard.

* * * The ordinary tenement in Fall River contains from three to five rooms with toilet, and the rents range from \$1.25 to \$4 per week. For the larger sum, a bath would be included. There are very few heated apartment-houses, and rents for these would be more than \$20 a month. The majority of wage-earners probably pay between \$1.75 and \$3 per week and do not have a bath. The demand for the larger apartments with baths far exceeds the supply. Many families are forced to live in inferior and crowded quarters at the present time because no others are to be obtained.

Two dollars twenty-five cents a week or \$117 a year for four rooms and toilet may be set as a minimum figure for housing a family of five in Fall River, according to existing conditions. Three dollars fifty cents a week or \$182 a year will secure somewhat better accommodations.

Clothing.—To obtain the cost of clothing for a family of five, budgets were constructed containing the different articles which probably would be purchased in the course of a year and prices were collected from a number of stores which cater to wage-earners. Quotations were secured for comparatively low-priced but standard grades of goods and these were averaged to obtain the prices given in Table 3. In deciding on the quantity of each article required, the quality of the goods was taken into account. In the case of articles which would not necessarily be replaced every year, what was considered to be a proper fraction of the cost in October, 1919, is given.

TABLE 3—COST OF A LIBERAL ALLOWANCE OF CLOTHING FOR A YEAR.

(National Industrial Conference Board)

Man's budget.	Cost, October, 1919.	Woman's budget.	Cost, October, 1919.
1 suit	\$28.00	1 coat or suit	\$26.00
1/2 overcoat	7.50	1/2 dress	5.25
1 pair heavy trousers	6.00	1 cotton skirt	1.98
1/2 sweater	2.50	2 waists	3.60
2 shirts	3.50	2 house dresses	4.25
3 work shirts	3.50	3 aprons	1.90
3 pairs overalls	5.65	1 1/2 pairs shoes	12.95
2 pairs shoes	15.75	1 pair overshoes . . . . .	.95
Repair of shoes	3.35	Repair of shoes	2.35
8 pairs hose	4.00	6 pairs hose	3.00
3 union suits	3.90	2 pairs corsets	4.65
2 nightshirts	2.80	4 union suits	4.00
4 collars	1.00	3 chemises	3.00
3 ties	1.50	2 petticoats	2.00
1/2 felt hat	1.75	3 nightgowns	4.50
Straw hat	2.00	1 straw hat	1.75
Cap	1.25	1 velvet hat	2.00
Gloves	2.25	Gloves	3.00
Sundries	3.00	Sundries	4.00
All items	\$99.20	All items	\$91.13

CHILDREN'S BUDGETS.

Boy Age 13-14	Cost, Oct., 1919.	Boy Age 5-6.	Cost, Oct., 1919.	Girl. Age 8-9.	Cost, Oct., 1919.
1/2 mackinaw	\$3.20	1/2 coat	\$2.60	1/2 coat	\$3.40
1/2 sweater	1.20	1/2 sweater	1.15	1/2 sweater	2.00
1 suit	12.75	1 suit	8.65	1 wool dress	8.00
1 pair trousers	2.25	1 pair trousers	1.80	2 cotton dresses	5.00
3 shirts	3.00	3 blouses	2.75	1 white petticoat	1.50
3 union suits	3.50	3 union suits	3.65	2 pairs bloomers	1.30
2 nightshirts	3.00	3 underwaists	1.85	3 union suits	2.75
8 pairs stockings	3.35	2 nightgowns	2.35	3 underwaists	1.89
2 pairs boots	8.00	6 pairs stocking	2.40	2 nightgowns	2.50
1 pair overshoes . . . . .	.95	2 pairs boots	5.40	6 pairs stockings	2.58
1 pair mittens . . . . .	.40	1 pair overshoes . . . . .	.75	2 pairs boots	8.00
2 caps	1.50	1 pair mittens . . . . .	.40	1 pair overshoes . . . . .	.80
3 ties	1.00	2 caps	1.80	1 pair mittens . . . . .	.40
Repair of shoes	2.40	1 Windsor tie . . . . .	.40	1 felt hat	2.00
Sundries	1.25	Repair of shoes	1.65	1 straw hat	1.80
		Sundries . . . . .	.50	Repair of shoes	1.65
				Sundries . . . . .	.50
All items	\$47.75	All items	\$38.10	All items	\$46.07

This clothing allowance for a family of five persons would cost \$322.25 a year at prices prevailing in Fall River in October, 1919. While the prices given are comparatively low and the quantity allowed is not excessive, clothing may be purchased for less and the requirements of decency and comfort at an American standard may be met with fewer articles. As a matter of fact, a large proportion of families in Fall River do not spend so much as this for clothing, since many of them make certain garments at home or buy them at bargain prices, with a material reduction in cost. For this reason, the clothing budget as given must be regarded as ample rather than as a minimum. To allow for the different means by which the cost of clothing may be reduced, approximately 25 per cent was deducted, bringing the annual minimum cost of an American standard of clothing in Fall River, according to prices prevailing in October, 1919, to \$243.36.

Fuel, heat and light.—The average wage-earning family in Fall River burns about three tons of coal per season. This provides fuel for a kitchen range and usually for one other stove. Prices of coal quoted by three dealers were as follows: Chestnut, \$13.75, \$13.75, \$13.00; stove, \$14.00, \$14.00, \$12.75.

This means an average annual expenditure of approximately \$40.63 for the grade of coal generally bought.

Many families, however, buy their coal in small lots from the neighborhood stores, which would make the total annual cost of fuel somewhat higher, provided the same amount were purchased. For this reason, and to allow for a minimum amount of kindling wood, it has been estimated that at least \$45 per year would be required for fuel at the prices prevailing in October, 1919.

Gas is commonly used for lighting. * * * In recognition of the fact that some families burn gas for cooking only and have an additional expenditure for electric light, the yearly cost of gas and electricity together is estimated at \$25.20 in 1919.

The average annual cost of fuel, heat and light combined in Fall River at prices prevailing in October, 1919, may therefore be placed at \$70.20, or \$1.35 per week. For families having larger homes the cost of these items would be somewhat greater. To allow for this, the expenditure for fuel, heat and light has been increased somewhat in the more liberal budget, making the annual cost of this item \$84.25, or \$1.62 per week.

Sundries.—From information received from the local street railway company, it appears that not over 25 per cent of the mill operatives use the street cars in going to and from work. The single fare

is 10 cents, but a commutation ticket plan was put into operation in September, 1919, by which 50 rides could be obtained for \$3, provided the ticket was used within a month. It has been found, however, that many of the more poorly paid wage-earners are not able to spend \$3 at one time for car tickets and the street-car company reported that, in practice, the tickets were sold mainly to those earning above \$25 a week. Some of the mills have now arranged to sell the \$3 tickets to their employees on the instalment plan.

The chief form of amusement in Fall River is moving pictures. There are a dozen houses in the city to which admission is usually 15 cents, or 17 cents with the war tax. Children are admitted to the smaller houses on Saturday afternoons for six cents. The patronage is large. One or two of the theaters frequently offer vaudeville shows and plays for which prices of admission range as high as \$2. There are also a number of public dance halls, to which admission is 25 cents.

Doctors' fees, by recent vote of the local medical society, are \$2 for an office call and \$3 for a house visit.

Almost all wage-earners in Fall River carry burial or life insurance, and the insurance business is said to be thriving. * * * Many of the mills are reported to be carrying life insurance policies for their employees valued at from \$500 to \$1,000. A contributory system of cash benefits for sickness also obtains in some of the mills.

The price of daily newspapers, French and English, is two cents, and the Boston Sunday paper, which is extensively read, is seven cents.

A considerable proportion of the amount spent for sundries apparently goes to the support of the church. The city is about 80 per cent Roman Catholic. * * * While, of course, public schools are provided in the city, about one-third of the children attend the parochial schools.

It is practically impossible to estimate the amount spent for each separate item in the sundries group, but in Table 4 is given an approximation of expenses in this division of the budget. Since expenditures for sundries vary widely as between different families, the total allowed may be spent in a large variety of ways. It is believed, however, that \$5.10 per week, \$265.20 per year, for the minimum budget is sufficient; the more liberal allowance is \$6.80 per week or \$353.60 per year.

The articles of food actually purchased by different families vary widely, of course, owing to differences in customs and tastes, and it is obviously impossible to construct budgets which would be universally applicable. The best that can be done in the case of a minimum standard, therefore, is to insure a sufficient and balanced diet, permitting of reasonable variety. The weekly allowance of \$11.55 for the minimum budget means that \$600.60 a year would be required for food for a family of man, wife, and three children under 14 years of age; for \$12.55 a week, or \$652.60 a year, a somewhat more liberal diet could be secured.

Shelter.—* * * The majority of mill operatives in Lawrence live in two-story or three-story frame tenements, although in the crowded down-town section the houses are larger. There is a great scarcity of houses of all kinds and at best there are very few cottages or heated apartments for wage-earners. The average tenement consists of four or five rooms, unheated, with gas and toilet or bath. Rents range from \$2.50 to \$5 a week. Three dollars fifty cents a week, or \$182 a year, is the least that should be allowed in November for a tenement in ordinary repair. For this sum four or five rooms with gas could be secured. There would probably not be a bath. For a somewhat better tenement of five rooms and bath \$4.50 a week, or \$234 a year, would be required.

Clothing.—The basic clothing budgets which were constructed for use in Fall River were also used in the Lawrence survey. These include the requirements of a man, his wife and three children, the ages of the latter being arbitrarily assigned for purposes of this study.

* * *

**TABLE 4—COST OF A MORE LIBERAL ALLOWANCE OF CLOTHING
FOR A YEAR.**

Man's budget.	Cost, November, 1919.	Woman's budget.	Cost, November, 1919.
1 suit	\$30.00	1 coat or suit	\$26.00
½ overcoat	9.25	½ dress	5.00
1 pair heavy trousers	7.00	1 cotton skirt	1.75
½ sweater	2.50	2 waists	4.00
2 shirts	4.50	2 house dresses	4.25
3 work shirts	4.50	3 aprons	2.50
3 pairs overalls	7.00	1½ pairs shoes	13.00
2 pairs shoes	20.00	1 pair overshoes . . . . .	.85
Repair of shoes	3.90	Repair of shoes	2.80
8 pairs stockings	2.00	6 pairs stockings	3.50
3 union suits	4.50	2 pairs corsets	4.00
2 night shirts	3.50	4 union suits	5.00
4 collars	1.00	3 chemises	4.25
3 ties	1.50	2 petticoats	2.75
½ felt hat	2.00	3 nightgowns	4.75
1 straw hat	2.00	1 straw hat	1.98
1 cap	1.65	1 velvet hat	1.98
Gloves	2.50	Gloves	3.25
Sundries	3.00	Sundries	4.00
All items	\$112.30	All items	\$95.61

CHILDREN'S BUDGETS.

Boy Age 13-14	Cost, Nov., 1919	Boy Age 5-6	Cost, Nov., 1919	Girl Age 8-9	Cost, Nov., 1919
½ mackinaw	\$3.25	½ coat	\$2.40	½ coat	\$3.50
½ sweater	1.50	½ sweater	1.20	½ sweater	1.55
1 suit	12.50	1 suit	6.50	1 wool dress.....	7.00
1 pair trousers....	2.00	1 pair trousers....	1.25	2 cotton dresses...	5.00
3 shirts	3.45	3 blouses	2.85	1 white petticoat..	.75
3 union suits.....	3.50	3 union suits.....	3.00	2 pairs bloomers....	1.00
2 night shirts.....	2.00	3 underwaists	1.50	3 union suits	3.00
8 pairs stockings...	3.60	2 night gowns.....	2.00	3 underwaists	1.60
2 pair shoes.....	12.00	6 pairs stockings...	2.40	2 night gowns.....	2.00
Repair of shoes....	2.40	2 pairs shoes.....	7.00	pairs stockings....	2.10
1 pair overshoes....	.95	Repair of shoes....	1.65	2 pairs shoes.....	10.35
1 pair mittens.....	.50	1 pair overshoes....	.70	Repair of shoes....	1.65
2 caps	1.75	1 pair mittens.....	.45	1 pair overshoes...	.75
3 ties	1.50	2 caps	1.60	1 pair mittens.....	.50
Sundries	1.25	1 Windsor tie.....	.45	1 felt hat.....	1.75
		Sundries .....	.50	1 straw hat.....	1.75
				Sundries .....	.50
All items.....	\$52.15	All items.....	\$35.45	All items.....	\$44.75

* * *

Fuel, Heat and Light.—Families living at a minimum standard usually burn about three tons of coal a year. The average cost of chestnut and stove coal, as secured from three dealers in November, 1919, was \$14 a ton. Some families at the minimum standard, however, do not buy coal in ton or half-ton lots, but resort to the more expensive method of purchasing it in bags from the neighborhood stores.

The amount and cost of kindling wood used varied widely. It was sold at the stores at the rate of four or five baskets for a dollar, and by some of the mills for materially less. To allow for a minimum amount of wood and to take into consideration the fact that coal is sometimes purchased in bags, \$4.50 has been added to the cost of three tons of coal, thus setting \$46.50 as a minimum annual expenditure for fuel.

Gas, which is very generally used for lighting and for a certain amount of cooking as well, cost \$1.25 net per thousand cubic feet in November. An average of about \$2 a month the year around for gas bills was reported by a number of wage-earners. Inasmuch as families living at the minimum standard presumably burn less, and those at the more liberal standard burn more than the average, the monthly bill of the former group has been arbitrarily placed at \$1.90 a month and that of the latter at \$2.10. To these figures must be added an increase of 9 per cent, effective in October, 1919. An annual expenditure of \$24.84 for gas is, therefore, given in the minimum budget.

For more liberal standard of living, four tons of coal a year have been allowed, at an annual cost of \$56. Four dollars fifty cents has been added for wood and \$27.48 for gas.

According to these figures, the average annual cost of fuel, heat and light in Lawrence, at prices prevailing in November, 1919, was \$71.34, or \$1.37 a week, for the minimum standard of living, and \$87.98, or \$1.69 a week, for the more liberal standard. * * *

Sundries.—Of all the divisions of the family budget, that including sundries is the most difficult for which to determine standards. Although it is impossible to estimate accurately the amount necessarily spent for each separate item, since the needs and desires of individual families vary very widely, a fair approximation may be reached.

From figures submitted by the Lawrence mills to the local Chamber of Commerce, it appears that not over 15 per cent of the employees ride to and from work. The street-car situation was much confused in November, 1919. * * *

There are a number of motion-picture houses in Lawrence, to

which the usual cost of admission is 11 cents in the afternoon and 17 cents in the evening. The price of daily newspapers is two cents; the Boston Sunday paper is seven cents. Doctors' fees are \$2 for an office call and \$3 for a house visit.

There are a great many clubs, societies and lodges in Lawrence, membership in which is generally confined to nationalistic groups. Nearly 100 lodges and over 100 clubs and societies are listed in the directory, but some of these are small. A considerable part of the social life of the city is carried on through these organizations. Some of the lodges offer their members sick or death benefit privileges also.

A large amount of burial insurance is carried by commercial life insurance companies. It is estimated that about 70 per cent of the wage-earners and their families are insured. The average weekly payment per policy is between 10 cents and 15 cents. Some individuals carry two or more policies, however, and the actual number of industrial policies as reported by the leading insurance companies is larger than the industrial population.

Lawrence is preponderantly Roman Catholic and the church is well supported. About one-third of the children attend parochial schools. * * *

Reasonable average expenditures for these and a few additional items, according to the best estimates available, are given in Table 5. On the basis of these estimates the necessary total allowance for sundries for the minimum standard amounts to \$5.12 a week, or \$266.24 a year. The more liberal budget allows for \$6.60 a week, or \$343.20 annually.

TABLE 5—AVERAGE COST OF SUNDRIES.

Item	Minimum standard		More liberal standard	
	Average weekly cost	Average yearly cost	Average weekly cost	Average yearly cost
Transportation:				
To work.....	\$.20	\$ 10.40	\$.20	\$ 10.40
For shopping and recreation.....	.20	10.40	.30	15.60
Movies and other entertainments.....	.67	34.84	1.00	52.00
Medical care.....	.60	31.20	.65	33.80
Insurance .....	.70	36.40	.90	46.80
Church and parochial schools.....	.90	46.80	1.20	62.40
Candy, tobacco, etc.....	.45	23.40	.60	31.20
Reading material.....	.20	10.40	.25	13.00
Household furnishings and supplies....	1.00	52.00	1.10	57.20
Organizations .....	.20	10.40	.40	20.80
Total sundries.....	\$5.12	\$266.24	\$6.60	\$343.20

THE COMPLETE BUDGET.

The average cost of all items entering into the family budget and of all items combined is given in Table 6. These figures indicate that at least \$1,385.79 a year is necessary to maintain a family of five at a reasonable minimum standard in Lawrence, according to prices prevailing in November, 1919. This requires an average weekly income of \$26.65 the year round. The somewhat higher standard of living demands a yearly income of \$1,658.04, or an average of \$31.88 a week. It should be noted that the totals both in the minimum and in the more liberal budget make allowance only for expenditures and do not include provision for savings except as this is effected by insurance.

TABLE 6—AVERAGE COST OF LIVING FOR A MAN, WIFE, AND THREE CHILDREN UNDER 14 YEARS OF AGE IN LAWRENCE, MASSACHUSETTS, NOVEMBER, 1919.

Budget item	Minimum standard		More liberal standard	
	Average weekly cost	Average yearly cost	Average weekly cost	Average yearly cost
Food	\$11.55	\$600.60	\$12.55	\$ 652.60
Shelter	3.50	182.00	4.50	234.00
Clothing	5.11	265.61	6.54	340.26
Fuel, heat and light.....	1.37	71.34	1.69	87.98
Sundries	5.12	266.24	6.60	343.20
All items.....	\$26.65	\$1,385.79	\$31.88	\$1,658.04

* * *

It should be emphasized, also, that the estimates given for the minimum budget have been made to meet the needs of a family with three children, where the father is assumed to be the sole wage-earner, and the mother is able to do all of the housework, including sewing and laundry. Many families in Lawrence comprise more than three children, and in many of them the mother, as well as the father, is at work. It may be, also, that some families in certain respects require less than the minimum indicated. But it appears from the evidence at hand that the maintenance of health and strength can scarcely be secured for less than the totals allowed.

VII

FOOD BUDGET, BROOKLINE, MASSACHUSETTS, 1920

The following food budget was offered as a "low cost market order" in the Brookline, Mass., Health Bulletin, April, 1920, published quarterly by the Board of Health, Brookline, Mass.

WEEKLY FOOD BUDGET.

To Provide Nourishing Meals for a Week for a Family of Five (2 Adults, 3 Children).

12	loaves bread	\$ 2.04	
3	lbs. flour . . . . .	.30	
3	lbs. rolled oats . . . . .	.23	
2	lbs. cornmeal . . . . .	.15	
1	lb. rice . . . . .	.20	
1	lb. macaroni . . . . .	.15	
1	lb. cream of wheat . . . . .	.30	
1	lb. crackers . . . . .	.22	
1/3	lb. tapioca . . . . .	.06	
			\$3.65
17	qts. milk	\$3.06	
2	lbs. cheese . . . . .	.84	
			3.90
1 1/2	doz. eggs	\$.83	
2	lbs. beef . . . . .	.70	
2	lbs. haddock . . . . .	.28	
1/4	lb. salt pork . . . . .	.08	
5	lbs. end of ham	1.00	
			2.89
1/2	pk. potatoes	\$.60	
1 1/2	lbs. beans . . . . .	.18	
2	lbs. carrots . . . . .	.20	
2	lbs. onions . . . . .	.24	
1	lb. turnips . . . . .	.08	
1	can spinach . . . . .	.25	
1	lemon . . . . .	.03	
3	lbs. prunes . . . . .	.75	
1	pkg. dates . . . . .	.25	
2	lbs. rhubarb . . . . .	.40	
			2.98
1	pt. oil	\$.42	
3	lbs. butter substitute	1.14	
1/4	lb. peanut butter . . . . .	.10	
1	qt. molasses . . . . .	.38	
2	lbs. sugar . . . . .	.40	
1/4	lb. cocoa . . . . .	.14	
			2.58
	Total		\$16.00

VIII

BUDGET OF FOOD AND FUEL, 1919, AS COMPILED BY THE WASHINGTON STATE BUREAU OF LABOR

Beginning with April, 1914, the Washington State Bureau of Labor has instituted during the month of April of each year a special investigation of prices of food and fuel. Statistics are secured by field agents from about 40 retail dealers in as many towns and cities throughout the the State. As to the relative importance of different items of expenditure, the Labor Commission states that "when the budget was first prepared, a great many families were interviewed as to varieties of articles and quantities thereof necessary for a family of five during a period of one year, so that in this particular the average amounts used are also accurate.

"A careful perusal will also convince that the quantities estimated are conservatively low. Flour, 686 pounds for a year, means only about six ounces per day per person for a family of five; potatoes, 800 pounds, means about seven ounces per day. Fresh meat and fish allowances are very small."

The budgetary table is divided into three sections, showing, respectively, the quantities and costs of groceries, of fresh meats and fish and of fuel. The quantities of each item allowed and the cost thereof at April, 1919, prices are as shown in the following table:

TABLE SHOWING THE ANNUAL COST OF FOODSTUFFS AND FUEL FOR A FAMILY OF FIVE IN 1919.

(Survey Made in Month of April, 1919.)

Quantity and Article.	Seattle.	Tacoma.	Spokane.
260 lbs. Sugar, granulated cane.....	\$27.30	\$27.82	\$28.34
14 sacks Flour, fancy patent, 49 lbs.....	42.76	41.54	42.57
2 sacks Cornmeal, 10 lbs.....	1.30	1.25	1.41
75 lbs. Rolled Oats, bulk.....	5.33	5.63	5.03
8 cwt. Potatoes, white.....	15.80	14.66	11.68
25 lbs. Beans, navy.....	2.60	2.08	2.63
26 lbs. Onions, dry.....	1.46	1.12	1.82
12 lbs. Barley, pearl.....	1.25	1.60	1.45
10 lbs. Split Peas.....	1.00	1.25	1.40
22 lbs. Rice, Japan.....	2.20	2.64	2.75
80 lbs. Butter, creamery.....	50.88	49.84	56.40
25 lbs. Lard Substitute.....	8.00	7.33	7.50
30 lbs. Soda Crackers.....	6.15	6.51	6.72
80 doz. Eggs, fresh.....	40.00	40.56	37.04
4 lbs. Macaroni.....	.46	.45	.41
20 lbs. Cheese, American.....	8.20	8.00	7.90
6 lbs. Cheese, cream.....	2.85	2.40	2.34
12 lbs. Raisins, seedless.....	1.72	1.80	2.16
20 lbs. Dried Prunes.....	3.10	2.84	3.10
8 doz. Lemons.....	2.48	2.40	2.60
3 gals. Syrup, corn.....	3.05	3.10	3.10
10 lbs. Comb Honey.....	3.67	3.67	3.83
3 gals. Pickles, sour.....	3.00	3.60	2.85
3 gals. Vinegar, cider.....	1.86	1.10	1.30
18 cans Canned Tomatoes, No. 3.....	4.10	3.60	3.69
22 cans Canned Corn, No. 2.....	4.84	4.29	4.18
20 cans Canned Peas, No. 2.....	4.36	3.50	4.02
9 cans Canned Beans, No. 2.....	1.96	1.96	2.10
3 lbs. Baking Soda.....	.28	.29	.29
9 lbs. Baking Powder, Cream Tartar.....	5.70	6.60	5.52
12 lbs. Cornstarch.....	1.25	1.40	1.69
50 lbs. Carrots.....	1.90	1.90	1.40
35 lbs. Cabbage.....	2.63	3.50	2.31
40 lbs. Coffee, medium grade.....	16.00	16.00	16.00
10 lbs. Tea, medium grade.....	5.00	5.00	5.00
12 pts. Tomato Catsup.....	3.70	3.20	3.34
20 lbs. Salt.....	1.25	1.25	1.25
85 bars Soap.....	5.27	5.27	5.27
Vegetables.....	20.00	20.00	20.00
Fruit.....	20.00	20.00	20.00
Milk, fresh and condensed.....	48.00	48.00	48.00
74 lbs. Lard.....	26.27	25.38	27.45
5 cans Canned Oysters, No. 2.....	1.54	1.50	1.50
5 cans Canned Clams, No. 1.....	.94	1.13	.90
24 lbs. Canned Salmon, No. 1.....	7.37	6.00	9.19
40 lbs. Smoked Bacon.....	21.52	21.68	20.72
20 lbs. Smoked Ham.....	8.88	9.56	8.62
10 lbs. Smoked Shoulder.....	3.33	3.57	3.00
150 lbs. Roast Beef.....	40.35	50.70	31.65
100 lbs. Boiling Meat.....	19.00	19.70	16.70
120 lbs. Steak.....	40.20	38.00	31.08
40 lbs. Veal.....	11.64	12.72	11.84
50 lbs. Mutton.....	19.35	18.30	14.90
60 lbs. Pork.....	23.34	14.12	23.52
25 lbs. Poultry.....	8.36	9.80	8.30
68 lbs. Fresh Fish.....	11.90	15.50	15.03
4½ cords Wood, stove length.....	63.00	34.50	50.06
4 tons Coal.....	36.40	34.33	43.63
Totals.....	\$726.05	\$705.44	\$698.48

IX

BUDGET SUBMITTED TO NATIONAL WAR LABOR BOARD BY W. F. OGBURN, 1918

In June, 1918, Professor W. F. Ogburn, then in charge of the cost-of-living section of the National War Labor Board, prepared and submitted for the use of the Board two budgetary studies as to the cost of maintaining a family of husband, wife and three dependent children. The first he designated as a "minimum of subsistence" level. The total cost of this, at prices then prevailing, he fixed at \$1,386, but did not itemize in detail the quantities in the budget. The second he designated as a "minimum comfort budget," the total cost of which, at prices then prevailing, was fixed at \$1,760.50. The detailed quantities and costs for this budget are shown in the following table:

MINIMUM COMFORT BUDGET FOR A FAMILY OF FIVE (PARENTS AND THREE CHILDREN) AT PRICES PREVAILING IN JUNE, 1918.

Summary.	
Food	\$ 625.00
Clothing	313.50
Rent, fuel and light.....	295.00
Sundries	527.00
Total.....	\$1,760.50
Detailed Items.	
Food	\$ 625.00
Clothing:	
Man	92.50
Woman	87.00
Boy, 13 years	57.00
Girl, 8 to 10 years.....	37.50
Boy, 4 to 7 years.....	39.50
Rent	220.00
Fuel and light.....	75.00
Insurance and savings.....	150.00
Health	60.00
Furnishings	50.00
Education	20.00
Carfare	55.00
Organizations (church, labor and others).....	24.00
Comforts (tobacco, candy, gifts, etc.).....	43.00
Recreation	50.00
Miscellaneous (cleaning ,stamps, barber, etc.).....	75.00
Total.....	\$1,760.50

Feed.		
600 pounds meat, fish and cheese.....	\$	175.00
730 quarts of milk.....		96.00
80 dozen eggs.....		34.00
8 pounds beans.....		14.00
360 pounds flour.....		24.00
360 pounds cornmeal.....		26.00
200 pounds cereals.....		20.00
48 pounds macaroni.....		5.00
50 pounds rice.....		6.00
600 pounds potatoes.....		13.00
600 pounds vegetables.....		36.00
600 pounds fruits.....		30.00
120 pounds butter.....		60.00
75 pounds lard, oils and fats.....		25.00
250 pounds sugar.....		23.00
40 pounds coffee.....		12.00
12 pounds tea.....		6.00
Sundries		20.00
Total.....	\$	625.00
Clothing.		
Man.		
Overcoat	\$	6.50
Sweater		2.50
Suit or uniform.....		25.00
Trousers		8.00
Shoes and repair.....		15.00
Overshoes		1.50
Underwear		6.50
Night garments.....		2.00
Hats		4.00
Shirts		6.50
Socks		4.50
Gloves		6.00
Ties, collars and handkerchiefs.....		2.00
Suspenders and garters.....		1.00
Incidentals		1.50
Total.....	\$	92.50

Woman.	
Top coat.....	\$ 8.00
Suits	12.50
Shoes and repair.....	12.00
Overshoes .....	.75
Underwear	5.00
Nightgowns	3.00
Underskirt	2.50
Corsets	4.00
Kimona .....	.50
Waists	5.00
House dresses.....	5.00
Street dress.....	7.50
Hats	9.00
Gloves	2.50
Stockings	2.00
Aprons	2.25
Umbrella	1.00
Incidentals (veils, pins, brushes, handkerchiefs, furs, slippers, etc.)....	4.50
Total.....	\$ 87.00
Boy 13 and Over.	
Top coat and sweater.....	\$ 7.50
Suit and trousers.....	17.00
Shoes and repair.....	16.00
Underwear	4.00
Night garments.....	1.50
Hats	3.50
Shirts	3.50
Stockings and socks.....	2.50
Ties, handkerchiefs, etc.....	1.50
Total.....	\$ 57.00
Girl 8 to 10.	
Top coat and sweater.....	\$6.00
Rubbers	1.50
Shoes and repair.....	15.00
Underwaists and garters.....	1.50
Dresses (school and best).....	6.00
Petticoats (or bloomers).....	1.50
Underclothes .....	....
Night garments.....	....
Hats	2.00
Stockings	2.00
Ribbons and handkerchiefs.....	1.00
Umbrella	1.00
Total.....	\$37.50

Boy 4 to 7.	
Top coat and sweater.....	\$4.50
Shoes and repair.....	15.00
Rubbers.....	1.50
Suits (work, best, overalls).....	9.00
Underwear.....	....
Underwaists and garters.....	1.50
Night garments.....	....
Hats and caps.....	1.00
Waists and blouses.....	2.50
Mittens, ties, handkerchiefs.....	1.00
Stockings.....	3.00
Total.....	\$39.50 ¹
Rent, Water, Fuel and Light.	
House, 5 or 6 rooms, with water.....	\$220.00
Coal, wood, gas and light.....	75.00
Total.....	\$295.00
Sundries.	
Insurance and savings.....	\$150.00
Organizations (labor and other).....	15.00
Education (newspapers, magazines and books).....	20.00
Church.....	9.00
Health (physicians, drugs, dentist).....	60.00
Furnishings.....	50.00
Carfare.....	55.00
Cleaning and laundry.....	25.00
Tobacco.....	15.00
Gifts (Christmas, etc.).....	8.00
Candy.....	5.00
Drinks.....	15.00
Amusements and vacations, etc.....	50.00
Stamps, barber, stationery, etc.....	15.00
Exigencies and waste.....	35.00
Total.....	\$527.00

¹The error of 50 cents in this total occurs in the original.

X

BUDGET AWARDED IN SEATTLE AND TACOMA STREET RAILWAY ARBITRATION, 1917

In 1917 there was appointed a board of arbitration to determine the matters in controversy between the Puget Sound Traction, Light & Power Co., the Tacoma Railway & Power Co. and their employees. The award, as finally made by the board in the fall of 1917, was based directly on budgetary studies regarding the cost of living. The budget worked out and approved by the board, together with the comments of the board thereon, are as follows:

MINIMUM COMFORT FOR ONE YEAR FOR A FAMILY OF FIVE.

Groceries—Meat—Fish	\$533.40
Fuel	60.00
Clothing—man	90.50
Clothing—woman	87.00
Clothing—girl of 8 or 9	32.50
Clothing—boy of 14	48.50
Clothing—boy of 5 or 6	33.00
Maintenance of household equipment	40.00
Education	11.00
Church—fraternal dues	20.00
Medicine—doctor, dentist	60.00
Insurance	30.00
Reading matter, music	*
Savings	100.00
Gas	20.00
Electric light	15.00
Rent and water	184.00
Street car fare	35.70
Tobacco, ice cream	30.00
Recreation—movies, etc.	30.00
Incidentals—stamps, barber, etc.	25.00
Miscellaneous	20.00
Total	\$1,505.60

* See Education.

TOTAL BUDGET.

Clothing	\$ 291.50
Food	533.40
Sundries	366.00
Rent etc.	314.70
Total	\$1,505.60

REMARKS ON TOTAL BUDGET.

This budget may be called a minimum comfort budget and is slightly higher than a minimum health budget. Various minimum health budgets have been constructed and vary slightly from city to city and significantly from year to year as the cost of living rises. The minimum comfort budget has been rarely set by experts. Theoretically such a standard would vary according to the definition of comfort of the particular investigator. Practically such varying levels are not as great as would seem theoretically because minimum comfort budgets, actually existing, group around a definite level.

The accompanying budget is not one for an *ideal* family. The ideal wife is one who wastes no calories in food preparation and one having expert knowledge of sewing of a graduate in domestic economy; but few actual wives have had the benefit of such education.

The budget is, however, a *generalized* budget. Thus some men smoke and some do not. The item for smoking should be generalized, very much as the statistical term, the arithmetic mean, is a generalized term.

Actual budgets *vary* around a particular definite level, just as men vary in stature and weight. Particular extremes are therefore not cited; but the items have been set near an approximate arithmetic mean of budgets, many of which have been collected from existing families; although there is some argument for setting items nearer the upper variations than near the mean.

The budget is for a family of five. Three children are chosen for various reasons. (a) Three children at least are necessary for the race to perpetuate itself. (b) Federal and state experts do not make out budgets for less than families of five; thus neither public nor expert opinion sanctions a smaller standard. (c) Standards of a warring and industrially competing nation would seem to demand three children as a minimum. (d) Unmarried men are less desirable than married men, individually and socially, physically and morally; and the economic barrier to marriage is recognized as an important one. (e) The family of five, while larger than the average in the company's employ, may nevertheless be taken as the standard family of workmen receiving the maximum hourly rate, and the lower differentials worked out from this rate.

REMARKS ON CLOTHING BUDGET.

The clothing estimates are made on the assumption that the wife does some sewing and remaking of some garments for the children. The figures are based on estimates of the life of garments to fractions of years. The clothing is also for a generalized family.

CLOTHING.

Man.

Top coats (mackinaw-overcoat, sweater).....	\$ 12.50
Suits (uniform, suit, extra trousers).....	34.00
Shoes (and repairs).....	14.00
Overshoes	1.50
Underwear (woolen and cotton).....	6.00
Night garments	1.50
Hats (uniform cap and hat).....	3.00
Shirts (flannel and cotton).....	6.50
Sox	3.00
Gloves (average conductor and motorman).....	5.00
Ties, collars and handkerchiefs	2.00
Suspenders and garters	1.00
Incidentals (cuff buttons, brush, etc.).....	.50
Total.....	\$ 90.50

Woman.

Top coat	\$ 8.00
Suits	12.50
Shoes (and repairs).....	14.00
Rubbers . . . . .	.50
Underwear	5.00
Nightgowns	3.00
Underskirt	2.00
Corset	3.00
Kimono . . . . .	.50
Waists	4.50
House dresses	5.00
Street dress	7.50
Hats	9.00
Gloves	2.50
Incidentals (veils, pins, purse, brush, slippers, handkerchiefs, etc.).....	4.50
Stockings	2.50
Aprons	2.00
Umbrella	1.00
Total.....	\$ 87.00

CLOTHING—Continued.

Boy of 13 or 14 Years.

Top coat (mackinaw and sweater).....	\$ 4.50
Suit (and trousers)	14.50
Shoes (and repairs).....	15.00
Underwear	4.00
Night garments	1.50
Hats	2.00
Shirts	3.00
Stockings	2.50
Ties, handkerchiefs, etc	1.50
Total.....	\$ 48.50

Girl of 8 or 9 Years.

Top coat (and sweater).....	\$ 5.00
Shoes (and repairs).....	12.00
Underwaists and garters	1.50
Dresses (school and best).....	5.75
Petticoat (or bloomers).....	1.00
Night garments	1.50
Hats	1.75
Stockings	2.00
Ribbons and handkerchiefs	1.00
Umbrella	1.00
Underwear . . . . .	.00
Total.....	\$ 32.50

Boy of 5 or 6 Years.

Top coat (and sweater).....	\$ 4.00
Shoes (and repairs).....	11.00
Suits (wash, best and coveralls).....	8.00
Rubbers	1.50
Underwaists and garters	1.50
Night garments	1.00
Hats (and caps).....	1.25
Waists (and blouses).....	2.00
Mittens, ties, handkerchiefs . . . . .	.75
Stockings	2.00
Underwear.....	.00
Total.....	\$ 33.00

REMARKS ON FOOD BUDGET.

Various dietaries with differing proportions of meats, vegetables, fats, etc., have been constructed and each totals nearly the same figure. The calorie requirements are slightly over 12,000 a day for a family of five, distributed as follows: man, 3,400; women, 2,700; boy of 13 or 14, 2,700; girl of 8 or 9, 2,000; boy of 5 or 6, 1,500. The figure for meat is a little lower than is actually found among the carmen's families, but it is quite probable that during war time the item for meat will become progressively lower.

FOOD.

Cereal	\$26.00
Vegetables	78.00
Fruit	41.60
Meat and meat substitutes.....	98.80
Flour	16.64
Bread	52.00
Fats	93.60
Sugar	23.40
Milk	87.36
Coffee and tea.....	16.00
Total.....	\$533.40

REMARKS ON SUNDRIES.

The insurance and savings item is larger than actually occurs, due probably to the fact that expenses and wages do not at present permit saving. The item is conservatively low. Medical and dental care varies widely, but \$60 seems to be near the present average. The miscellaneous item is included because it actually exists.

SUNDRIES.

Amusements (movies, vacations, picnics, etc.).....	\$30.00
Education and literature.....	11.00
Insurance and savings.....	130.00
Comforts (tobacco, candy, Christmas, etc.).....	30.00
Organizations	20.00
Dental and medical care.....	60.00
Incidentals (stamps, barbers, stationery, etc.).....	25.00
Household (furniture, laundry, tools, etc.).....	40.00
Miscellaneous (exigencies and waste).....	20.00
Total.....	\$366.00

REMARKS ON RENTS, ETC.

In some houses the water is not included in the rent. Gas has recently risen, and the estimate is on the proposed raise.

RENT, ETC.

Rent and water.....	\$184.00
Gas	20.00
Light	15.00
Fuel	60.00
Carfare	35.70
Total.....	<u>\$314.70</u>

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XI

COST OF LIVING OF UNSKILLED LABORER'S FAMILY, NEW YORK CITY, 1917

From the Report on the Increased Cost of Living for an Unskilled Laborer's Family in New York City, prepared by the Bureau of Personal Service of the Board of Estimate and Apportionment, New York City, February, 1917.

INTRODUCTORY STATEMENT.

In February, 1915, and again in February, 1917, the Bureau of Personal Service, in conjunction with the Bureau of Municipal Research, made a study of the cost of living for an unskilled laborer's family. After a careful consideration of the average size of families among laborers in general, in the United States, in the City of New York, and among the rank and file of the Department of Street Cleaning in particular, it was decided to select for purposes of study a family consisting of five members, a wage-earner, his wife, and three children of school age, who could not be expected to contribute anything to the family support. It was decided to fix the sex and ages of the children as follows:

* * * * *									
Boy	.....	13	years						
Girl	.....	10	years						
Boy	.....	6	years						

* * *

CLASSIFICATION OF OBJECTS OF EXPENDITURE.

The following table shows a comparison of the results of studies made in February, 1915, and February, 1917, of the cost of living for an unskilled laborer's family in New York City. The increase in cost in those two years seems to be approximately 16 per cent.

Objects of expenditure have been classified in eight standard groups, for each of which the total annual expense in the years 1915 and 1917 is as follows:

	1915.	1917.
I.—Housing	\$168.00	\$168.00
II.—Carfare	30.30	30.30
III.—Food	383.812	492.388
IV.—Clothing	104.20	127.10
V.—Fuel and Light	42.75	46.75
VI.—Health	20.00	20.00
VII.—Insurance	22.88	22.88
VIII.—Sundries	73.00	73.00
Total per year	\$844.942	\$980.418
Sundries classified—		
Papers and other reading matter .....	....	\$5.00
Recreation .....	....	40.00
Furniture, utensils, fixtures, moving expenses, etc. ....	....	18.00
Church dues .....	....	5.00
Incidentals—Soap, washing material, stamps, etc. ....	....	5.00
Total .....	....	\$73.00

I—Housing:

A family consisting of five people needs at least four rooms to meet the demands of decency. Three rooms for more than four persons causes over-crowding. Four rooms, on the other hand, for five persons is slightly above the accepted standard of "one and one-half persons to a room." * * *

II—Car Fare:

The minimum estimate for car fare remains unchanged at \$30.30, which represents only 10c per day for 303 working days.

III—Food:

In arriving at a proper minimum for food expenditure, a number of factors must be taken into consideration. A laborer, in order to perform efficient work, requires nourishing and wholesome food in considerable quantities. The age of children is an all important factor in determining their food consumption. The prices of food-stuffs are constantly changng.

The schedule adopted by the United States Department of Agriculture (Farmers' Bulletin No. 142) apportions the food requirements of women and children of various ages on the basis of fractions of the integer required to support a mature working man. This schedule is as follows:

Man	1.0
Woman .....	.8
Boy—16 years.....	.9
12 to 16 years.....	.8
10 to 12 years.....	.6
Girl—15 to 16 years.....	.8
14 to 15 years.....	.7
10 to 14 years.....	.6
Child—6 to 9 years.....	.5
2 to 5 years.....	.4
Under 2 years.....	.3

According to the above table the family which we have assumed, consisting of a man, wife, boy of 13 years, a girl of 10 years, and a boy of 6 years, would consume a quantity of food sufficient for 3.7 men.

In 1907, Federal government dietitians agreed that families spending at the rate of 22c per man per day were not receiving food enough to maintain physical efficiency. Moreover, this minimum was predicated upon extraordinary intelligence, in that it assumed that the mother possessed a scientific knowledge of household economy, food values, and market conditions. The food prices in 1913, as compared with 1907, had risen 16 per cent, according to a report of the United States Department of Labor. (Retail Prices and Cost of Living, Series 8). Taking the 22c per man per day minimum established in 1907 and allowing a 16 per cent increase, 25½c would be the minimum measured by 1913 standards. Adding to this a 1½c marginal limit, to provide for discrepancies and for an increase in prices in 1914, 27c per man per day was arrived at as a fair minimum for 1915. This was the minimum established at that time by the Association for Improving the Condition of the Poor as the basis of their relief work and was used as a basis for calculation in the 1915 report of this bureau. At the present time the Association for Improving the Condition of the Poor is using 30c as its minimum because of the increased cost of food. Upon these two bases the cost of food per day for our family in New York City would be:

	1915. Per day.	1917. Per day.
Husband	\$0.270	\$0.30
Wife .....	.216	.24
Boy, 13 years.....	.216	.24
Girl, 10 years.....	.162	.18
Child, 6 years.....	.135	.15
Total per day.....	\$0.999	\$1.11
Total per week.....	\$7.00	\$7.77

This conclusion is based upon scientific facts regarding the number of calories of heat and grams of protein necessary for the human body. It is only one and by no means the most trustworthy of several logical methods of reaching a minimum estimate.

Another and more trustworthy method of approach to such a conclusion is to price a list of foodstuffs necessary for an American family of five. Following this method, an itemized food budget was taken from Dr. Chapin's book on "Standard of Living in New York City," and was submitted for criticism to dietitians and social service workers, with the result that the list was slightly modified. In order to find the prevailing cost of the modified list in New York City, foodstuffs were priced in the places where unskilled laborers would naturally buy; that is, municipal markets, push-carts, co-operative stores and regular neighborhood grocery and butcher establishments. (For this food budget used in field work, with prices for 1915 and 1917, see Appendix A.) This method of approach led to the conclusion that \$7.381 per week, or \$383.812 per year, would be the minimum requirement for 1915.

In securing facts as to the increased cost of food for 1917, this same list of foodstuffs was again priced at markets, push-carts, and stores of the same type as before and the average amount of increase ascertained. From this investigation it was learned that the cost of exactly the same foods is at the present time \$9.469 per week, or \$492.388 per year, showing an increase of \$2.088 per week, or \$108.576 per year, over the cost for 1915. It may be noted that it is possible to sustain life on a less varied and less expensive diet than that considered in this report, but, as stated before, this study is based upon the standards of living consistent with American ideas.

IV—*Clothing*:

The clothing estimate was made in the same way as that for food. A list of the clothing needed by a family of five was taken from Dr. Chapin's report and considerably modified. The prices of the various articles in this clothing budget were obtained from the type of stores at which workingmen would naturally buy. (For copy of this list of clothing, with prices for 1915 and 1917, see Appendix A.)

It is difficult to make exact statements about the expenditure for such an item as clothing, in which there are so many personal considerations. Basing our estimate, however, upon average common-sense requirements and upon prices prevailing in 1915 for these

requirements, we concluded that \$104.20 for our assumed family of five was the exact clothing cost for that year. Prices for this clothing list were again obtained in February, 1917, in the same way in which food prices were checked, and were found to total \$127.10 as against \$104.20 in 1915.

V—Fuel and Light:

The fuel and light estimate of \$42 for 1915 was based on facts submitted by the Consolidated Gas Company and by public and private relief organizations, and on past studies, taking into consideration, however, the prevailing prices of coal, wood and gas. (For supplementary data see Appendix A.) All of the estimates submitted were in the neighborhood of \$40 to \$45.

Our conclusion for 1915 was a fair mean and allowed for the following approximate consumption of fuel and gas:

Fuel:

During the winter months, 3 bags of coal per week at 25c a bag, and 6 bundles of wood per week at 2c per bundle, resulting in a weekly expenditure of 87c. During the fall months, 2 bags of coal per week at 25c per bag, and 4 bundles of wood per week at 2c a bundle, resulting in a weekly expenditure of 58c. Assuming 18 weeks for the winter and 13 weeks for the fall, the total expenditure for fuel amounted to \$23.20 for 1915.

Light and Gas Used for Fuel:

Light, assuming the use of gas during the 18 weeks of winter, at 25c per week, 13 weeks of the fall at 35c per week, and 21 weeks of the summer at 50c per week, amounts to a total expenditure of \$19.55. During the fall and summer gas is used for cooking. Thus the consumption is increased.

The estimate for 1917 is changed only by an increase in the cost of coal from 25c to 30c a bag. This rise causes an increase in the total yearly expenditure for fuel to \$27.20 as against \$23.20 in 1915.

VI—Health:

The problem for arriving at a minimum for health expenditure is necessarily involved. Several studies have been made upon this subject which for our purposes are quite satisfactory. The Metropolitan Life Insurance Company, in connection with its welfare work,

has considered health expenditure in more detail than has any other organization. Dr. Lewis I. Dublin, their statistician, who has studied this problem from an insurance standpoint, concludes that a workingman will average five weeks' illness once in every three years, or that one out of every three workingmen will be sick in each year. A prominent benevolent society, organized in St. Louis for the special purpose of establishing health insurance, has arrived at the conclusion that an adult requires 50 cents and a child 25 cents a month for health expenditure. This totals \$21 a year for our family of five persons. Prof. Irving Fisher, of Yale, who has devoted considerable study to health insurance, states that the average expenditure resulting from illness and death in workingmen's budgets is \$27 per annum. This amount is agreed to by the United States Commissioner of Labor (1912) and by Dr. Dublin, although Dr. Dublin supplements this by stating that even at this rate the family will to some extent be dependent upon charity.

Our conclusion of \$20 is based upon the fact that there are more facilities for conserving the health of a family in New York City than elsewhere and that \$27 under these conditions would be too high. We realize, however, that it is impossible to establish beyond criticism a definite amount for health expenditure. This amount, first established in 1915, remains unchanged for 1917.

VII—*Insurance:*

Insurance is found to be an almost universal item in budgets of workingmen's families. The expenditures of \$22.88 in our minimum estimate is based upon the assumption that the head of the family should be insured for \$500, the wife for \$100, and that the children should each have the smallest amount of insurance which can be obtained. This is merely industrial insurance and does not provide for sickness, accident, or property loss. * * *

In industrial insurance weekly payments are the rule. For a \$500 policy the premium is 25c a week, for a \$100 policy 10c a week, while a minimum of 3c is required for the policies of children—a total weekly payment of 44 cents, or a yearly expenditure of \$22.88 for the family. Our estimate is based on the rates offered for those policies considered most satisfactory by the three insurance companies which specialize in industrial insurance. This amount remains the same in 1917 as in 1915.

VIII—*Sundries.*

The item "Sundries" includes recreation, reading, general household expense, church contributions, etc. It is unnecessary to defend the fact that a family in order to maintain a normally happy and self-respecting existence must have proper amusements. For recreation, therefore, we have allowed occasional trips to the beach, incidental car fare, moving-picture shows, Christmas and birthday presents and miscellaneous amusements. For furniture, utensils, fixtures, moving expenses and general maintenance, \$18 is allowed, although this amount could be legitimately increased. \$5 is allowed for church contributions. Incidentals, including soap, washing material, stamps, umbrellas and other miscellaneous items, are totaled at \$5. For reading a one-cent daily paper is allowed, with a Sunday paper almost every week. The resulting \$73 expenditure for sundries is a fair minimum. This amount, fixed originally in 1915, is allowed to remain unchanged for 1917, although some slight increase could legitimately be made.

APPENDIX

Field Reports—Supporting Data on Food, Clothing, Rent, Fuel and Light
The prices of the above commodities were obtained during the months of January and February, 1915, and February, 1917:

MINIMUM FOOD BUDGET FOR ONE WEEK FOR FAMILY OF FIVE, WITH CURRENT PRICES

	1915	1917
MEAT AND FISH—		
5 lbs. Beef, at 16c. lb.....	\$0.80	at 20c., \$1.00
½ lb. Beef for Stew, at 12c. lb.....	.06	at 16c., .08
2 lbs. Pork, at 14c. lb., 28c. or		at 22c., or
2 lbs. Ham, at 18c. lb., 36c.....av.	.32	at 22c., .44
1 lb. Chicken (4 lbs. month), at 18c. lb.....	.18	at 23c., .23
1½ lbs. Fresh Fish, at 12c. lb.....	.18	at 15c., .225
	<hr/> \$1.54	<hr/> \$1.975
EGGS AND DAIRY PRODUCTS—		
1 lb. Butter, at 33c. lb.....	.33	at 41c., .41
½ lb. Cheese, at 20c. lb.....	.10	at 27c., .135
2 doz. Eggs, at 32c. doz.....	.64	at 42c., .84
16 qts. Milk, at 6c. qt.....	.96	at 8c., 1.28
	<hr/> \$2.03	<hr/> \$2.665
CEREALS—		
21 Loaves of Bread, at 5c.....	1.05	at 6c., 1.26
1 doz. Rolls, at 10c. doz.....	.10	at 12c., .12
2 lbs. Cake, at 10c. lb.....	.20	at 20c., .40
Rice (1 lb. per month), at 7c. lb.....	.017	at 8c., .02
Flour (3½ lbs. twice a month), at 4½c. lb....	.078	at 7c., .122
Oatmeal (2½ lbs.), at 4c. lb.....	.10	at 5c., .125
	<hr/> \$1.545	<hr/> \$2.047
VEGETABLES, FRUITS, ETC.—		
6 qts. Potatoes, at 8c. qt.....	.48	at 10c.,* .60
Turnips or Carrots.....	.05	.06†
2 lbs. Onions, at 3c. lb.....	.06	at 8c., .16
Fresh Vegetables.....	.75	1.937
Dried Beans and Peas (½ lb.).....	.05	at 14c., .07
Can of Tomatoes, at 10c. can.....	.10	at 12c., .12
Can of Corn (monthly), at 10c. can.....	.025	at 12c., .03
Fresh Fruit.....	.25	.25
Dried Prunes (1 lb. per month), at 14c. lb.....	.035	at 14c., .035
	<hr/> \$1.80	<hr/> \$2.262
SUGAR, TEA, COFFEE, ETC.—		
1 lb. Coffee, at 20c. lb.....	.20	at 20c., .20
1¾ lbs. Sugar, at 5½c. lb.....	.096	at 8c., .14
Syrup.....	.02	.02
Pickles, Spices, etc.....	.05	.06
¼ lb. Tea, at 40c. lb.....	.10	at 40c., .10
	<hr/> \$0.466	<hr/> \$0.52

* At 5c. per lb.

† Average 20 per cent. increase in cost.

‡ Average 25 per cent. increase in cost.

	1915	1917
Meat and Fish.....	\$1.54	\$1.975
Eggs and Dairy Products.....	2.03	2.665
Cereals.....	1.545	2.047
Vegetables, Fruits, etc.....	1.80	2.262
Sugar, Tea, Coffee, etc.....	.466	.52
Total per week.....	\$7.381	\$9.469
Annual Total.....	\$383.812	\$492.388

MINIMUM CLOTHING BUDGET FOR ONE YEAR FOR FAMILY OF FIVE, WITH CURRENT PRICES

MAN		
	1915	1917
2 Caps	\$0.75	\$1.00
1 Suit	8.00	10.00
1 Overcoat (last 3 yrs.)	5.00	6.00
1 Pair Pants	1.50	2.00
3 Working Shirts.....	1.50	1.80
1 White Shirt .....	.50	.60
3 Collars .....	.30	.45
2 Pairs Overalls	1.50	2.00
2 Ties .....	.20	.20
6 Pairs Hose.....	.60	.60
3 Pairs Shoes.....	6.00	7.50
Repair of Shoes (twice)	1.50	1.50
Summer Underwear (2 suits)	1.50	2.00
Winter Underwear (2 suits)	1.50	2.00
Cloth for Night Gown.	.25	.25
Gloves and Mittens....	.50	.50
4 Handkerchiefs .....	.20	.20
Sundries .....	.50	.50
Total	\$31.80	\$39.10

WOMAN		
	1915	1917
2 Hats (last 2 years)..	\$2.00	\$2.00
1 Coat (last 2 years)..	4.00	5.00
1 Suit	6.00	9.00
3 Waists	1.50	1.50
2 Wash Dresses	2.50	2.50
2 Petticoats	1.00	1.00
3 Aprons .....	.45	.45
6 Handkerchiefs.....	.30	.30
6 Pairs Stockings .....	.60	.60
2 Pairs Shoes	4.00	6.00
Repair of Shoes (twice)	1.00	1.00
Summer Underwear (3 suits)	.60	.75
Winter Underwear (3 suits)	1.05	1.35
Mittens .....	.25	.25
Rubbers .....	.50	.70
Linen and sundries....	4.00	4.00
Total	\$29.75	\$36.40

BOY (13 years)		
	1915	1917
2 Caps	\$0.50	\$0.50
1 Winter Suit.....	2.00	3.95
1 Summer Suit	1.00	1.25
1 Overcoat (last 2 yrs.)	1.50	2.00
6 pairs Stockings.....	.60	.60
3 Waists (material)...	.50	.65
Summer Underwear (3 suits)	.60	.90
Winter Underwear (3 suits)	.90	1.35
3 Pairs Shoes.....	4.50	6.00
Repair of Shoes (3 times)	1.50	1.50

	1915	1917
Mittens .....	.50	.50
6 Handkerchiefs .....	.20	.30
Sundries .....	.50	.50
Total	\$14.80	\$20.00

BOY (6 years)		
	1915	1917
1 Cap	\$0.25	\$0.25
1 Winter Suit	1.00	1.75
1 Summer Suit .....	.50	.50
1 Overcoat (last 2 yrs.)	1.00	1.50
6 Pairs Stockings.....	.60	.60
3 Waists (material)...	.30	.40
Summer Underwear (3 suits)	.30	.30
Winter Underwear (3 suits)	.60	.60
3 Pairs Shoes	3.00	3.75
Repair of Shoes (3 times)	1.50	1.50
Mittens .....	.50	.50
3 Handkerchiefs .....	.10	.15
2 Ferris Waists.....	.30	.30
Total	\$9.95	\$12.10

GIRL (10 years)		
	1915	1917
2 Hats—winter, 75c., summer 50c.	\$1.25	\$1.25
1 Stocking Cap (school)	.25	.25
1 Coat (last 2 years)..	2.00	2.50
2 Winter Dresses (material)	2.00	2.00
2 Summer Dresses (material)	1.00	1.00
1 Sweater	1.00	1.00
6 Handkerchiefs .....	.20	.30
6 Pairs Stockings .....	.50	.50
2 Pairs Mittens .....	.50	.50
3 Petticoats .....	.75	.75
3 Ferris Waists .....	.45	.45
Summer Underwear (3 suits)	.60	.75
Winter Underwear (3 suits)	.90	1.05
2 Pairs Shoes	3.00	3.50
Repair of Shoes (twice)	1.00	1.00
Rubbers .....	.50	.70
Sundries	2.00	2.00
Total	\$17.90	\$19.50

CLOTHING SUMMARY		
	1915	1917
Man	\$31.80	\$39.10
Woman	29.75	36.40
Girl, 10 years.....	17.90	19.50
Boy, 13 years.....	14.80	20.00
Boy, 6 years.....	9.95	12.10
Total per year..	\$104.20	\$127.10

XII

SUGGESTED FAMILY BUDGET, SOCIAL SERVICE BUREAU OF BELLEVUE HOSPITAL, 1917

Printed in Report on the Increased Cost of Living for an Unskilled Laborer's Family, New York City Board of Estimate and Apportionment.

The following is an itemized family budget as drawn up by Mary Wadley, supervisor of the Social Service Bureau of Bellevue Hospital, and five district workers, who have obtained all the information at first hand. These figures are the conservative estimates of women who are daily meeting problems arising from poverty, and who have an exact knowledge of the needs of the typical worker's family. These are not ideal estimates. They represent the practical requirements for maintaining a *decent* standard of living.

The basis of this budget is a family of five—husband, wife and three children under 14 years.

HOUSING			
	1915	1917	
	Per Year	Per Year	
Rent (3 rooms), \$14 per month.....	\$168.00	\$168.00	
CARFARE			
	1915	1917	
	Per Year	Per Year	
Carfare (303 days).....	\$30.30	\$30.30	
FUEL AND LIGHT			
	1915	1917	
	Per Week	Per Week	
Fuel—3 bushels coal, at 25c. per bushel.....	\$0.75	at 40c., \$1.20	
6 bundles wood, at 2c. per bundle.....	.12	at 2½ c., .15	
Total per week.....	\$0.87	\$1.35	
Total per year (26 weeks).....	22.62	35.10	
	1915	1917	
	Per Year	Per Year	
Fuel (total coal and wood).....	\$22.62	\$35.10	
Gas—\$1.25 per month x 6½ months.....	8.125	8.125	
2.25 per month x 5½ months (summer)*.....	12.375	12.375	
Total per year	\$43.12	\$55.60	

* No coal is used during the summer months. The gas bill is, therefore, increased \$1 per month.

FOOD

Minimum Budget for One Week

MEAT AND FISH—

	1915	1917
5 lbs. Beef, at 13c. a lb.....	\$0.65	at 18c., \$0.90
½ lb. Beef, at 10c. a lb.....	.05	at 15c., .08
2 lbs. Pork, at 32c. a lb., 64c., or		at 20c., or
2 lbs. Ham, at 14c. a lb., 28c.....av.	.46	at 20c., .40
1 lb. Chicken (4 lbs. a month).....	.16	.24
1½ lbs. Fresh Fish, at 8c. a lb.....	.12	at 14c., .21
	<hr/> \$1.44	<hr/> \$1.83

EGGS AND DAIRY PRODUCTS—

1 lb. Butter.....	\$0.29	\$0.42
½ lb. Cheese, at 18c.....	.09	at 30c., .15
24 Eggs (storage, 31c. a doz).....	.62	at 55c., 1.10
16 qts. Milk,* at 6c. a qt.....	.96	at 9c., 1.44
	<hr/> \$1.96	<hr/> \$3.11

CEREALS—

21 Loaves of Bread, at 5c.....	\$1.05	at 6c., \$1.26
1 doz. Rolls .....	.10	.12
2 lbs. Cake, at 10c. a lb.....	.20	at 15c., .30
Rice (1 lb. per month).....	.02	2½ lbs. per mo.,
		at 8c., .05†
Flour (3½ lbs. twice a month).....	.07	.10
Oatmeal (2½ lbs.), at 4c. a lb.....	.10	at 5c., .13
	<hr/> \$1.54	<hr/> \$1.96

VEGETABLES, FRUITS, ETC.—

6 qts. Potatoes (10c. for 3½ lbs.).....	\$0.18	1qt., at 20c. qt., \$0.20†
Turnips or Carrots .....	.05	.10
2 lbs. Onions, at 2c. a lb.....	.04	at 10c., .20
Fresh Vegetables .....	.50	.75
Dried Beans and Peas .....	.05	.12
Can of Tomatoes .....	.07	.10
Can of Corn (per month 8c.).....	.02	at 12c., .03
Fresh Fruit .....	.25	.35
Dried Prunes (1 lb. per month 8c.).....	.02	at 14c., .035
	<hr/> \$1.18	<hr/> \$1.885

SUGAR, TEA, COFFEE, ETC.—

1½ lbs. Coffee, at 20c. a lb.....	\$0.30	\$0.30
1¾ lbs. Sugar (18c. for 3½ lbs).....	.09	at 26c., .13
Syrup (four 10c. cans per year).....	.008	.008
Pickles, Spices, etc.....	.05	.05
	<hr/> \$0.448	<hr/> \$0.488

FOOD SUMMARY

	1915	1917
Meat and Fish.....	\$1.44	\$1.83
Eggs and Dairy Products.....	1.96	3.11
Cereals	1.54	1.96
Vegetables, Fruits, etc.....	1.18	1.885
Sugar, Tea, Coffee, etc.....	.448	.488
	<hr/>	<hr/>
Total per week	\$6.568	\$9.273
Total per year	341.536	482.196

* Loose milk.

† It will be noted that rice is largely substituted for potatoes because of the high price of potatoes.

CLOTHING

Budget for One Year

MAN		1915	1917
2 Hats or Caps.....		\$2.00	\$2.00
1 Suit		10.00	14.00
1 Overcoat (\$10, last 2 yrs.)		5.00	7.00
1 Pair of Pants.....		2.00	2.50
3 Working Shirts.....		1.50	1.50
2 White Shirts		1.00	1.50
6 Collars .....		.60	.90
2 Pairs Overalls.....		1.50	1.96
4 Ties .....		.50	.60
4 Handkerchiefs.....		.20	.20
6 Pairs Hose.....		.60	.90
Gloves and Mittens....		.50	.50
Shoes, 2 pairs.....		4.00	5.00
Repair of shoes(twice)		1.50	1.50
Underwear			
Summer, two suits..		1.00	1.00
Winter, two suits...		1.50	1.50
		<u>\$33.40</u>	<u>\$42.56</u>

Boys (6 and 4 years)		1915	1917
2 caps		\$1.00	\$1.00
1 Suit (2 Trousers), Winter		3.00	4.00
1 Overcoat (\$3, last 2 years)		1.50	2.25
6 prs. Stockings .....		.50	.90
3 Waists .....		.75	.75
Underwear			
Summer, 3 suits....		.60	.60
Winter, 3 suits....		1.00	1.50
Shoes, 2 pairs.....		3.00	4.00
Repair of shoes (twice)		1.00	1.00
3 Ferris Waists.....		.75	.75
6 Handkerchiefs .....		.25	.30
Mittens, 2 pairs.....		.50	.50
Rubbers .....		.50	.65
Ties .....		.25	.35
Summer suit		1.00	2.00
Sundries .....		.50	.50
Each		<u>\$16.10</u>	<u>\$21.05</u>

WOMAN		1915	1917
2 Hats (\$6, last 2 yrs.)		\$3.00	\$3.00

	1915	1917
1 Coat (\$8, last 2 yrs.)	4.00	5.00
1 Suit	8.00	10.00
3 Waists (2 at 50c. and 1 at \$1).....	2.00	3.00
2 Wash Dresses.....	2.50	2.50
2 Petticoats	1.00	1.00
3 Aprons .....	.45	.45
6 Handkerchiefs .....	.45	.45
6 Pairs Stockings .....	.60	.90
2 Pairs Shoes	4.00	5.00
Repair of Shoes(twice)	1.00	1.00
Underwear		
Summer, three suits	.60	.60
Winter, two suits...	1.40	2.00
Gloves and Mittens....	.75	.75
Linen	6.00	6.00
Rubbers .....	.50	.75
Sundries	3.00	4.00
	<u>\$39.25</u>	<u>\$46.40</u>

GIRL		1915	1917
2 Hats, Winter best, \$1.50; Summer best, \$1.00 (last 2 yrs.), \$2.50.....		\$1.25	\$1.25
1 Stocking Cap (School)		.25	.50
2 Winter Dresses.....		4.00	5.00
2 Wash Dresses (Summer)		2.00	2.00
1 Coat (\$4, last 2 yrs.)		2.00	2.50
1 Sweater		1.00	1.50
6 Handkerchiefs .....		.25	.30
6 pairs Stockings.....		.50	.90
2 pairs Mittens .....		.50	.50
3 Petticoats .....		.75	1.00
Linen		1.50	2.00
3 Ferris Waists .....		.75	.75
Undewear			
Summer, 3 suits....		.60	.60
Winter, 2 suits.....		1.00	2.00
Shoes, 2 pairs.....		4.00	5.00
Repair of shoes (twice)		1.00	1.00
Rubbers .....		.50	.65
Sundries		1.50	2.00
		<u>\$23.35</u>	<u>\$29.45</u>

CLOTHING SUMMARY

	1915	1917
Man	\$33.40	\$42.56
Woman	39.25	46.40
Boys (2)	32.20	42.10
Girl	23.35	29.45
Total per year	<u>\$128.20</u>	<u>\$160.51</u>

INSURANCE

1917

Average weekly premium, male adult 10c.

" " " female adult 10c.

" " " child (5c.x3) 15c.

35c. per week—\$18.20 per yr.

HEALTH

1917

Medicines.....50c per month—\$6.00 per year.

NOTE—No doctor's fees are included in this budget, because the Social Service Bureau has based its figures on families receiving free medical treatment at Bellevue Hospital.

SUNDRIES

	1915	1917
Papers and other reading matter.....	\$5.00	\$5.00
Recreation	35.00	35.00
Church dues	10.00	10.00
Furniture, utensils, fixtures, etc.....	15.00	20.00
Spending money for father.....	5.00	5.00
Miscellaneous—Soap, Washing Material, Stamps, Moving Expenses, etc.	5.00	8.00
Total per year	\$75.00	\$83.00

FINAL SUMMARY

	1915 Per Year	1917 Per Year
Carfare	30.30	30.30
Housing	\$168.00	\$168.00
Fuel and Light	43.12	55.60
Clothing	128.20	160.51
Insurance	18.20	18.20
*Health (Medicine)	6.00	6.00
Sundries	75.00	83.00
Food	341.536	482.196
Total per year.....	\$810.356	\$1,003.806
Allowance for doctor's fees or sick benefit organization dues	14.00	14.00
Grand Total.....	\$824.356	\$1,017.806

* This does not include fees for doctor's services.

XIII

A MINIMUM BUDGETRY ESTIMATE FOR PACIFIC COAST WORKERS, 1917

Dr. Jessica B. Peixotto, of the faculty of the University of California, in October, 1917, prepared a detailed estimate of the minimum outlay required for a workingman's family of husband, wife and three children of school age, in San Francisco. This amount she placed at \$110 a month with the statement that it covered a minimum standard of wholesome living and not mere subsistence.

"The typical worker in San Francisco," she states in her explanatory comment, "belongs to a class which insists upon having food enough to provide a palatable and somewhat varied dietary; shelter and clothing that conforms to the traditional idea of the 'decencies' rather than the 'necessities'; some income to pay for schooling the children, for relaxation in leisure hours, and something to provide against the risks of ill health, invalidity and death. Though the total looks large, it is actually little above Miss Byington's estimates in her Homestead Study, considering the rise in the prices of food and clothing. Inspection of the individual items will show that very modest sums have been assigned to each class of wants. The housewife who keeps within the amounts specified must still have to be a cautious purchaser, and capable in preparing foodstuffs and industrious in making clothing.

"It would seem, then, that the present scale of wages is such that a family of man, wife and three children of school age cannot be maintained without getting into debt or receiving aid on much less than \$110 a month. When the normal breadwinner is paid less than this sum, one of three things, any one of them harmful for the group and for the community, is likely to happen:

"1. Other members of the family will have to work to eke out the income; or

"2. There will be less food than is necessary for the men to do efficient work. The risks of ill health to all members of the group

and the consequent costs to the group and to the society are equally plain; or

"3. The group must go without many of the articles noted under Sundries and House Operations. The probabilities of stupidity, early breakdown, and dependency are evident, for the expression of the more subtle capacities, the capacity for foresight, for generosity, for sociability, depends on having some money for 'Sundries.' One of the most important differences between social dependents, potential or actual, and self-supporting citizens is that social dependents are willing to go without the money for 'Sundries', and capable men and women recognize the imperative need for the money that will buy those things the term covers."

LIVING EXPENSES FOR FAMILY OF FIVE

Items	Month	Year	Total
Rent	\$20.00	\$240.00	\$240.00
House Operation	11.50	138.00	138.00
Fuel	3.00	36.00	.....
Light	1.50	18.00	.....
Laundry . . . . .	.25	3.00	.....
Soap, Matches, etc.	1.00	12.00	.....
Garbage Removal . . . . .	.25	3.00	.....
Furnishings—maintenance and additions.	2.50	30.00	.....
Telephone	1.50	18.00	.....
Incidentals—occasional help, repair of house	1.50	18.00	.....
Food	45.00	540.00	540.00
Clothing . . . . .	.....	288.40	288.40
Man . . . . .	.....	74.50	.....
Wife . . . . .	.....	73.90	.....
Children (3, all under 12 years) . . . . .	.....	140.00	.....
Sundries	22.50	270.00	270.00
Car Fare	4.00	48.00	.....
Medicines	1.25	15.00	.....
Doctors and Dentists	5.00	60.00	.....
Savings (for invalidity)	5.00	60.00	.....
Organization Dues	1.25	15.00	.....
Insurance (burial)	2.00	24.00	.....
Stamps and Stationery . . . . .	.25	3.00	.....
Newspapers, School Supplies, etc.	1.25	15.00	.....
Tobacco, Drinks, etc.	1.00	12.00	.....
Church, Charity, etc. . . . .	.50	6.00	.....
Gifts (Christmas, etc.)	1.00	12.00	.....
Grand total . . . . .	.....	.....	<u>\$1,476.40</u>

SUMMARY TABLE

Items	Amounts
Rent	\$240.00
House Operation	138.00
Food	540.00
Clothing	288.40
Sundries	270.00
Grand Total	<u>\$1,476.40</u>

XIV

FOOD BUDGETS IN RELATION TO NUTRITION; STUDIES OF PROFESSOR M. E. JAFFA

During September, 1917, an Arbitration Board which had been appointed to adjust the wages of employees of the street railways of Oakland, Cal., requested Prof. M. E. Jaffa, of the College of Agriculture, University of California, to submit for their information a report regarding the increase in cost of food during the preceding ten years. As several other members of the faculty of the university had been asked for similar reports, Professor Jaffa decided to leave the matter of the total family income to be discussed by the economists and to emphasize in his report the purely nutritional side of the problem.

"Food is no longer," he states, "considered as a mere appeaser of the appetite. It is now recognized, in the serious aspect, as a satisfier of the physiological needs of the body. These fundamental food needs do not vary with the income, but depend upon such things as growth, weight and amount of work performed. It takes just as much milk to nourish the body of one baby as it does another, regardless of the father's earning capacity. A man engaged in heavy labor requires more food than does an office man, regardless of the difference in income. But the *diet* is a different matter. One man may eat rib roast, while another eats stew—but meat they both require. One may eat hothouse berries while the other eats dried apples—but fruit they both should have. In other words, a proper diet for any family should be drawn in right proportion and in adequate amounts from all five food classes, but for the family of small income the selection must be made, in large part, from the cheaper foods or grades of food in each class, and the quantity is usually found to be nearer to a minimum than can be considered desirable.

"The following table shows the effect of increased prices on the total food cost for a family of small income. It expresses the average of many dietary studies of such families and has been modified just enough to overcome undesirable deficiencies due to enforced privations, and to meet the minimum demands for health and efficiency.

"It cannot be sufficiently emphasized that while this type of diet has been selected as a working basis, it is not therefore to be considered a sufficient or an approved diet. Only a certain proportion of people can maintain health on a minimum—which provides only that amount of energy which the body actually puts forth in the processes of living and working. It provides no safety factor, and allows for no individual differences. No person should be held down to a minimum when the appetite and apparent bodily needs seem to call for more. A minimum expresses the line below which it is dangerous to go. All the food which this diet calls for is necessary, but not necessarily all that is required.

MINIMUM DIET ON WHICH HEALTH CAN BE MAINTAINED FOR A WORKINGMAN, HIS WIFE AND THREE CHILDREN BETWEEN 4 AND 14 YEARS OF AGE.¹

Food materials.	Food and cost for one month.		
	Pounds	1907	1917
Class I—			
Meat and fish.....	50	\$ 5.75	\$10.00
Milk	120	4.80	6.00
Eggs	6	.81	1.56
Beans	8	.40	1.60
Class II—			
Flour	60	1.38	4.80
Cereals	17	.49	1.36
Macaroni	4	.28	.50
Rice	10	.60	.83
Class III—			
Potatoes	35	.70	2.17
Vegetables	55	1.38	1.65
Fruits	50	2.25	2.50
Class IV—			
Butter	8	2.29	3.60
Oils and fats.....	10	1.35	2.50
Class V—			
Sugar	25	1.38	2.25
Extras—			
Coffee and tea.....	2	.73	1.00
Sundries ²		2.06	3.00
Total per month.....		\$27.09	\$45.32

¹The table as here reproduced omits data for the years 1912 and 1916.

²Sundries include yeast, cornstarch, cocoa, cheese, syrup, salt, etc.

"A study of this table shows that the cost of food for the family diet here presented has gone up, in ten years, from \$27.00 to \$45.00—an increase of upwards of 67 per cent. Staggering as these figures are when considered in connection with a stationary income, the increase shown in the last year is by far most serious. It is quite evident that the increased cost of nearly \$18.23 shown in the table could not have been met by many families under discussion. It will be necessary, then, to consider what adjustments have been made, and the effect of these adjustments upon the health of the family.

"Much has been accomplished by many people by substituting one food for another as prices have changed. Some of this has been legitimate and helpful—some has been unwise and detrimental.

"The extent to which substitution can be practiced depends almost entirely upon the type of the original diet, and this, in turn, depends upon the income. Not only is the total supply of food more generous on the large income, representing the maximum for health rather than the minimum, but the distribution of foods in the various classes is different. On a low income, people can afford only a small quantity of the concentrated foods, meat, eggs, butter and sugar, the largest proportion of their diet coming from the starchy foods which are "bulky," and furnish the cheapest form of nourishment for the money expended. As the income goes up and people are free to exercise their instinctive choice, the use of meat, eggs, butter, sugar, etc., increases, and the starchy foods are decreased and replaced in part by the other class of bulky foods—fruits and vegetables, which are more expensive for the nourishment they contain, and are, therefore, not used freely by poorer people. We have, then, two very different types of diet to consider. Let us see what happens to each when prices rise.

MEAT.

"When meat increases in price, the well-to-do, who have usually bought a large proportion of choice cuts, can substitute inferior ones on some days, use beans occasionally, or reduce their meat quantity somewhat. Where cheap meats, however, have been the rule, and where beans have always been used for economy, there is no recourse but to pay the price or go without. And when, at the same time, beans jump nearly 300 per cent, the detrimental form of substitution begins, and starchy foods and inadequate

amounts of milk or cheese are substituted for protein. One food cannot be used with safety to replace another unless it is in the same class, as each of the five classes have important and different uses in the body.

POTATOES.

"Again, when potatoes increase in price, most people use rice or macaroni as a substitute, although potato is a vegetable and not a cereal food. Here again the well-to-do suffer no harm. Their supply of other vegetables, as well as fruit, was enough for their physiological needs. But the people on a minimum diet have always depended upon potatoes very largely to furnish that fresh quality, and those special minerals, so important to health. They have never afforded much other vegetable, nor do these other furnish the amount of nourishment, in addition to the hygienic values, that potatoes do. Therefore, people of small income suffered in health. That this form of substitution was detrimental was shown in several institutions where this form of economy caused a decided increase in the drug bills.

SUGAR.

"There is no cheap substitute for sugar, and when this food became expensive, the quantity was reduced and nothing was substituted.

As the maximum and medium diets provide good amounts of all forms of concentrated foods, a moderate reduction in quantity of one kind, or several, can be made without injury to health. But where the diet is already low, the loss of nourishment is keenly felt, and when all other forms of concentrated foods are also expensive, no adequate substitution can be made.

"The scheme works like this:

Cereal food forms the cheapest and largest part of the diet. The price rises, and the pocket book is strained.

Meat and beans increase in price, and people are told to eat more cereals. Result: more bulky food, unbalanced diet, less nourishment, but more expense.

Butter increases in price. The supply is cut down. People are told that other foods can provide the nourishment. Result: more bulk, less balance, and less nourishment.

Sugar increases in price. Amount is cut down and nothing is substituted.

Milk increases in price. Amount is cut down and nothing is substituted. Result: more loss of protein and of fat.

Cereals rise again. There is no cheaper food, and nothing can be substituted.

"Where the income is small this process soon drains the diet of those foods which are most essential to health, and forces it down below the danger line." * * *

After pointing out many popular misconceptions as to the increased cost of living, Professor Jaffa concludes: "A great many persons tend to ignore a small percentage of advance in price of a particular foodstuff which as a matter of fact may be very serious because of the importance of the food or the frequent use of it, while, on the other hand, great stress is often laid on a spectacular rise in price of a food which may be used only occasionally and, as a consequence, adds little to the total food cost of a family."

INCREASED LIVING COSTS, 1916-1917.

An employer of labor requested the University of California Agricultural Experiment Station for an estimate of the increased cost of living which he might use as a basis for adjustment of wages with his employees. Accordingly, Prof. M. E. Jaffa, to another branch of whose work reference has just been made, prepared a statement (which has been printed as a bulletin of the Agricultural Experiment Station) showing for an average family the increase in the cost of living from May, 1916, to May, 1917, and the influence of the change in prices on the nutrition of families.

"It is impossible," Professor Jaffa states, "to estimate the expenses of any family without knowing all the conditions, but there are certain fixed items of expense, and the percentage of increase in cost is known for others. These form a good basis for calculation in regard to the effect of high prices on the mode of living of a family of small income and will be discussed in turn. The accompanying table shows how the varying prices of foodstuffs affect the total food cost."

**MINIMUM DIET ON WHICH HEALTH CAN BE MAINTAINED FOR A WORK-
INGMAN, HIS WIFE AND THREE CHILDREN BETWEEN 4 AND 14
YEARS OF AGE.**

	Food and cost for 1 month.			Market price per pound.	
	Pounds.	1916.	1917.	May, 1916.	May, 1917.
Meat and fish	50	\$8.00	\$10.00	\$0.16	\$0.20
Milk	120	4.80	6.00	.04	.05
Eggs	6	1.08	1.56	.18	.26
Beans	8	.40	1.60	.05	.20
Flour	60	1.92	4.80	.032	.08
Cereals	17	1.02	1.36	.06	.08
Macaroni	4	.32	.50	.08	.125
Rice	10	.60	.83	.06	.083
Potatoes	35	1.05	2.17	.03	.062
Vegetables	55	1.65	1.65	.03	.03
Fruits	50	2.50	2.50	.05	.05
Butter	8	2.40	3.60	.30	.45
Oils and fats	10	2.00	2.50	.20	.25
Sugar	25	1.75	2.25	.07	.09
Coffee and tea		1.00	1.00	.30	.30
Sundries		2.50	3.00		
First total		\$32.99	\$45.32	per month.	
Extra for man		2.55	3.25		
Second total		\$35.54	\$48.57	per month.	
Per person per day . . . . .		.237	.324		

"The first total is adequate if the man of the family is engaged in ordinary labor. The second total allows for 1,000 calories extra food for heavy work. If the labor performed is that of a lumberman or harvest hand, a further increase of three and a quarter dollars is necessary.

"Additional children will add the following amounts to the food budget:

	Per month.
Between 3 and 6 years	\$ 5.70
Between 6 and 9 years	6.75
Between 9 and 13 years	7.90
A girl over 13 years	9.00
A boy over 13 years	\$10.50 to \$11.00

"The item of 'Sundries' includes such articles as corn starch, syrup, cheese, salt, pepper, mustard, yeast, etc.

"The diet here presented expresses the minimum on which health and efficiency can be maintained. It admits of many re-arrangements between the staples of the same class, according to the preferences of people of different nationalities; more macaroni, less rice; more vegetables, less fruit; more meat and less milk; but no appreciable variations could be made in the cost without a corresponding decrease in the nourishment. In view of this fact the increase in cost of $33\frac{1}{3}$ per cent is serious.

"It is unnecessary to say that many families live on much less than the diet given, which may account for a large proportion of stunted children, many diseases, early death or inefficiency.

"*Clothing*—This item of expense varies greatly according to the ages of the children and the ability of the family to live up to any kind of standard. But the increase averages $33\frac{1}{3}$ per cent. The most important item under this heading is shoes, the price of which has increased in greater proportion than that of other articles of clothing. It is impossible to reduce the cost of shoes, as can be done with other kinds of wearing apparel, by making up cheap material at home.

"Shoes show an increase in price of 50 per cent at present, but this will undoubtedly be changed to 100 per cent in the near future when the retailers are obliged to replace their stock at the ruling wholesale prices. The following estimate of the shoe cost for the family considered is conservative and shows an increase of 50 per cent for the past year.

COST OF SHOES PER MONTH FOR FAMILY OF FIVE.

	1916	1917
Shoes	\$3.25	\$5.00
Repairs	2.00	3.00
	\$5.25	\$8.00

"*Rent*—The prices paid for rent in cities by families of small income range from \$12 to \$17, so that \$15 seems a fair average for the budget of the family.

"Since the food cost is often 40 or 50 per cent, and the rent 20 per cent of small incomes, and since clothing, which often takes the

lion's share of the balance, has increased $33\frac{1}{3}$ per cent, it would seem that enough data are at hand to warrant a preliminary budgeting for a family with an assumed income of \$75 a month.

	1916	1917
Rent	\$15.00	\$15.00
Light	1.50	1.50
Fuel	3.00	3.00
Food	33.00	45.00
Shoes	5.25	8.00
	\$57.75	\$72.50
Balance.....	17.25	2.50
Income.....	\$75.00	\$75.00

"In 1916 there was a balance of \$17.25 a month to cover such other expenses as

Insurance	Church support
Organization dues	Car fares
Drugs	Vacation
Doctor bills	Recreation
Dentist bills	Amusements
Clothing (except shoes)	Incidentals
School incidentals	Emergencies
Household upkeep	

"In 1917 there is \$2.50 a month left to cover this long list of items, many of which are unavoidable, others urgent, and few of which can be omitted.

"The higher prices have in all probability been met by a reduction in the food supply of the family. Rent must be paid, shoes and some little clothing must be bought, other incidentals must be met, but food, which is the largest item of expense and is susceptible of manipulation, can generally be reduced. This should not be done at the expense of the growth and development of the children and the efficiency and endurance of the adults."

XV

COST AND STANDARDS OF LIVING IN NEW YORK STATE, 1914

New York Factory Investigating Commission.

From Report on the Cost of Living by Frank Hatch Streightoff. Appendix VII. Fourth Report of Factory Investigating Commission, 1915, Albany N. Y., 1915. (Pp. 1625-1656.)

The industrial families of this country have been found to expend from 35 to 50 per cent of their incomes for sustenance alone, the proportion depending upon the amount of their earnings. Since food is such a large item in the budgets, a variation in prices from city to city would occasion a considerable difference in the cost of living. It became apparent, therefore, that special attention to the costs of foods was highly desirable. * * * Miss Gibbs of the New York Association for Improving the Condition of the Poor, furnished two model dietaries for a week's supply of food for a normal family, and Professor Rose of Columbia University contributed some dietaries prepared by the students in the Department of Domestic Science of Teachers' College. Two of the best of these dietaries were selected. It was impossible to obtain from each city prices for all the foods on these lists. Some of the missing figures were filled in by using the average for the cities where quotations could be obtained. * * *

WEEKLY DIETARY No. 1.

Comparative Cost in Five Cities.

I	II	III	IV	V	VI	VII
Commodity.	Amount.	Cost on August 1, 1914, in				
		N. York.	Buffalo.	Syracuse.	Elmira.	Albany.
1. Milk, qts.....	14	\$1.26	\$1.05	\$1.22	\$0.98	\$1.06
2. Bread, stale, lbs.....	16	.30	.30	.30	.30	.30
3. Oatmeal, lbs.....	3	.19	.18	.19	.19	.14
4. Cornmeal, lbs.....	3	.15	.09	.10	.09	.12
5. Oleomargarine, lbs....	1	.22	.22	.25	.20	.22
6. Granulated sugar....	3½	.19	.18	.18	.18	.18
7. Rice, lbs.....	1	.08	.08	.08	.09	.10
8. Eggs ,doz.....	1	.34	.25	.27	.28	.29
9. Beans, dried, lbs....	1	.06	.06	.06	.06	.08
10. Lima beans, dried, lbs.	1	.09	.09	.09	.09	.13
11. Macaroni, lbs.....	½	.09	.07	.07	.08	.11
12. American cheese, lbs.	1	.23	.22	.19	.20	.22
13. Prunes, lbs.....	2	.28	.24	.18	.22	.30
14. Dates, lbs.....	1	.17	.08	.12	.10	.12
15. Potatoes, lbs.....	7½	.17	.15	.17	.17	.18
16. Apples, lbs.....	6	.22	.12	.20	.21	.22
17. Onions, lbs.....	5	.28	.25	.45	.40	.30
18. Bananas—doz.	{1}					
lbs.	{6}	.13	.15	.16	.17	.21
19. Cabbage—heads	{1}					
lbs.	{4}	.05	.05	.06	.08	.07
20. Apricots, dried, lbs...	1	.21	.17	.16	.19	.20
21. Gelatin, oz.....	2	.10	.10	.10	.10	.10
22. Weakfish, lbs.....	2	.20	.24	.20	.30	.26
23. Beef suet, lbs.....	1	.12	.12	.12	.12	.12
24. Flank steak, lbs.....	3	.57	.43	.60	.65	.60
25. Bacon ends, lbs.....	2	.36	.18	.28	.42	.32
26. Chopped beef, lbs....	2	.40	.32	.28	.38	.44
27. Breast mutton, lbs...	3	.27	.33	.30	.45	.42
28. Beef heart, lbs.....	2	.22	.16	.18	.24	.20
29. Junket tablets, lbs...	2	.02	.02	.02	.02	.02
30. Cocoa, lbs.....	½	.18	.13	.10	.13	.19
31. Cocoa shells, lbs....	1	.10	.10	.10	.10	.10
32. Total cost.....		\$7.25	\$6.13	\$6.78	\$7.19	\$7.32
33. Relative cost.....		100.0	84.6	93.6	99.1	101.0
34. Cost per man per day		\$0.30	\$0.25	\$0.28	\$0.29	\$0.30

WEEKLY DIETARY No. 2.

Comparative Cost in Five Cities.

I Commodity.	II Amount.	III	IV	V	VI	VII
		Cost on August 1, 1914, in				
		N. York.	Buffalo.	Syracuse.	Elmira.	Albany.
1. Milk, qts.....	14	\$1.26	\$1.05	\$1.22	\$0.98	\$1.06
2. Bread—loaves	{10}	*.50	*.50	*.50	*.50	*.50
lbs.	{12}					
3. Cereal (oatmeal), lbs.	2	.12	.12	.13	.12	.09
4. Sugar, lbs.....	3½	.19	.18	.18	.18	.18
5. Butterine, lbs.....	1	.25	.21	.21	.20	**22
6. Cocoa, lbs.....	½	.18	.13	.10	.13	.19
7. Eggs, doz.....	1	.34	.25	.27	.28	.29
8. Chuck steak, lbs.....	2	.36	.32	.37	.39	.41
9. Bacon, lbs.....	½	.13	.12	.11	.12	.13
10. Codfish, lbs.....	1	.12	.13	.15	.15	.11
11. Rice, lbs.....	1	.08	.08	.08	.09	.10
12. Cheese, lbs.....	1	.23	.22	.19	.20	.22
13. Macaroni, lbs.....	1	.09	.07	.07	.08	.11
14. Jelly, pt.....	½	.10	.10	.10	.10	.10
15. Beans (dried), lbs....	2	.12	.12	.11	.11	.15
16. Tapioca, lbs.....	½	.05	.04	.04	.04	.05
17. Molasses, pt.....	1	.09	.05	.08	.07	.09
18. Raisins, lbs.....	½	.06	.05	.05	.06	.06
19. Cabbage—head	{1}					
lbs.	{3}	.05	.05	.06	.08	.07
20. Onions, lbs.....	4	.22	.20	.36	.32	.24
21. Potatoes, lbs.....	10	.23	.20	.23	.23	.24
22. Spinach, lbs.....	1	*.06	*.06	*.06	*.06	*.06
23. Apples, lbs.....	10	.37	.20	.33	.35	.37
24. Carrots—bunches ...	{4}					
lbs.	{4}	.11	.09	.10	.20	.12
25. Condensed milk, lbs...	½	*.05	*.05	*.05	*.05	*.05
26. Canned tomatoes, pt..	1	.08	.08	.08	.08	.08
27. Dried apples, lbs.....	1	.15	.11	.13	.13	.12
28. Barley, lbs.....	½	*.05	*.05	*.05	*.05	*.05
29. Tea, lbs.....	¼	.12	.12	.10	.14	.14
30. Coffee, lbs.....	½	.15	.13	.15	.16	.18
31. Total cost.....		\$5.91	\$5.08	\$5.66	\$5.65	\$5.78
32. Relative cost.....		100.0	86.0	95.8	95.6	97.8
33. Cost per man per day		\$0.28	\$0.24	\$0.27	\$0.27	\$0.28

**No quotations secured; average price in other cities used.

*No quotations that are trustworthy; price assumed.

Nutrition Standards.

When an attempt is made to determine how much it costs to feed family it is necessary to adopt some standard of adequate nutrition. Physiological chemists have experimented on human beings for a long

time with a view of discovering what are the food requirements of people in various walks of life and at different ages. Authorities are not yet agreed as to what standards should be adopted. For this reason it seems wise to accept those criteria which have found recognition in the works on food from a social viewpoint, namely, the standards of Professor Atwater. If a man at moderate physical labor needs a certain amount of food, a woman doing such light work as housekeeping requires approximately eight-tenths as much, a boy of sixteen years or more, nine-tenths as much; a child under two, three-tenths as much. That is, if the needs of the man are 1, those of the woman are 0.8 and those of the child under two, 0.3. The complete scale of food requirements, starting with a man at moderate physical labor, as follows:

Man	1.	Girl (14 to 15) . . . . .	.7
Woman . . . . .	.8	Girl (10 to 14) . . . . .	.6
Boy (16) . . . . .	.9	Child (6 to 9, incl.) . . . . .	.5
Boy (12 to 16) . . . . .	.8	Child (2 to 5, incl.) . . . . .	.4
Boy (10 to 12) . . . . .	.6	Child (under 2) . . . . .	.3
Girl (15 to 16) . . . . .	.8		

The food required by man is of three sorts. First, the nitrogenous or protein substances contain elements without which the body cannot be built up, without which destroyed tissues cannot be replaced. Proteins are, therefore, absolutely essential to human life. Just how much protein food is needed is a matter that has long been in dispute. There is no sufficient reason for departing from the usually accepted standard, namely, that a man of approximately average weight requires about 125 grams of protein per day although individuals may thrive on less if their food is properly masticated.

The two other kinds of food which are absolutely essential are the carbohydrates and the fats. The principal function of these classes of food is the furnishing of energy to heat and to run the body machine. A man generally needs enough food to furnish 3,500 calories per day. In other words, a man at moderate labor must have enough protein substance to furnish him with the proper amount of body-building material plus an addition of carbohydrates and fats to give him energy for his work.

The translation of these chemical and physical food standards into terms of money has been a matter of great interest to social students. It will be recalled that in 1907, under the auspices of the New York State Conference of Charities and Corrections, a study of

the standard of living was made in New York City. One hundred actual food budgets were sent to Prof. Frank. P. Underhill of the Sheffield Laboratory of Physiological Chemistry, Yale University. After studying these budgets, Professor Underhill found that, unless an average of 22 cents per man was daily expended for food, the nutrition of a family usually fell below these physiological requirements. On the other hand, if 22 cents or more per man was spent each day, the chances that nutrition would be adequate were much better, although a number of families spending more than the sum named were under-fed. The next year 50 budgets collected in Buffalo, under the direction of John R. Howard, Jr., were submitted to Professor Underhill, who found that the minimum expenditure for proper nutrition was 21 cents per man per day in that city. The difference of one cent between these two cities in the minimum money requirement for food seems to have been due largely to the fact that the New York dietaries included expenditures for beer, which was not counted as a food in Buffalo.

What do these figures mean? For practical illustration, suppose a family consists of a man, his wife, a boy of 16 and a girl of 13. How may these standards be applied? As a consumer of food the man counts as 1.0, his wife as 0.8, the boy as 0.9 and the girl as 0.6. In other words, that household of four people would need 3.3 times as much food as one man. If it costs 22 cent a day to nourish one man, to feed this family it would cost 3.3 times 22 cents or \$.726. Thus, if there is in existence a recognized standard for the cost of feeding a man, it is a simple matter to derive a standard for feeding a family of any given composition. The question arises then, how well the 22 cents per man per day found to be the minimum cost of food in 1907 in New York City applies in 1914.

In order to answer this question, the quotations compiled by the Federal Bureau of Labor Statistics were studied, and it was found that food prices in New York City had risen 16 per cent from 1907 to 1913—in other words, that the minimum cost of food, according to Professor Underhill's standard, would have been \$.255 per man per day in 1913. This standard has been tested from another angle. Miss Gibbs of the New York Association for Improving the Condition of the Poor has been working for several years on the problem of determining the necessary minimum outlay in feeding the families dependent upon that society. The results of her experiments have shown that, after considerable expenditure of patience and energy, the housewife can be taught to provide adequate diet for the family at the rate of 27 cents per man per day if the family numbers three

or more. Her standard is but one and a half cents above that found by Professor Underhill when corrected for the rise in prices to 1913. In this report the Gibbs standard has been adopted for two reasons. First, Miss Gibbs thinks her standard none too high; in fact, she desires that it be raised as soon as sufficient funds are available. In the second place, Professor Underhill, while sure that a large proportion of families were under-fed if they expended less than his standard, was not certain that households expending more would be properly fed.

Adopting, then, this standard of \$0.27 per man per day as the minimum necessary expenditure for food, it may be well to select a family of normal size and to determine its necessary food expenditures for a year. In the group of families earning from \$8 to \$9 studied by the Committee on the Cost of Living in 1907, the average food requirement was 3.3 that of the food of one adult male. A household, for instance, consisting of a man (1.0), his wife (0.8), a boy of ten (0.6), a girl of eight (0.5), and another child of four (0.4) would have the consumption capacity quoted. A family composed of a man (1.0), his wife (0.8), a boy of sixteen (0.9), and a girl of thirteen (0.6) would have the same needs. At the rate of \$0.27 per man, the daily cost of feeding such a family would be \$0.891, and the yearly cost \$325.22. A larger household has greater needs, but it may be assumed that for New York City a normal family should have at least \$325 a year to be expended on food. Since the prices in other cities of the State were different from those in New York, it is well to translate this New York City standard into terms of the prices in the other municipalities. In Buffalo the food allowance would be \$281.64, in Syracuse \$295.30, in Elmira \$315.46, and in Albany \$324.56. Thus it can be said with substantial certainty that a minimum necessary cost of food has been established for the normal family.

The Cost of a House.

It is a comparatively easy matter to determine how much food is required by an ordinary household; it is more difficult to decide how much should be spent in securing proper housing. The importance of the dwelling can hardly be exaggerated when one considers the problem of health. Light is essential to cleanliness, and ventilation, of course, is an absolute necessity. No toilet should be used by more than one family. In order that these and other important requirements may be realized, it has been necessary to pass a very specific and stringent tenement-house law. In all newly-built tenements a toilet must be within each apartment; large courts must be pro-

vided; and the height of the building is limited, in order that light may penetrate to the lower windows and that there may be ample air space. Tenements which comply with this law can be considered, in the main, satisfactory for dwelling purposes; but comparatively few such buildings have been erected in the metropolis for working class families; and the reason has been that their construction is not a paying proposition. So there are not enough apartments meeting modern legal standards to go around among the families that need homes.

Housing and morals are closely related in many ways. In the first place, unless rooms are so arranged that privacy is possible, there are inevitable associations which tend to degrade the finer sense of decency. This is particularly true if there are many persons occupying one apartment and the rooms are crowded. Another relation between housing and morals should be noted, namely, the fact that one living in a tenement-house is thrown into intimate contact with other families, and the lower standards are frequently contagious. * * *

Social workers seem to agree that if the average number of persons per room is more than one and five-tenths, the apartment is too crowded for decency. According to this standard, a family of five or of six needs at least four rooms; but the bars might be lowered by a small margin. If five individuals are in three rooms the ratio is one and seven-tenths persons to a room. There may be no particular harm in this proportion if only the rooms are properly arranged. The second part of the standard to be adopted is that each family should have a separate toilet. For obvious reasons this seems absolutely essential not only as a matter of health, but also for the sake of decency, and has been properly incorporated in the New York City Tenement-House Law.

Housing in New York City.

Adopting then these two criteria, what will be the cost in New York City of an apartment fit for a family of five? * * *

It seems that at least \$200 a year must be allowed for the rent and heating of a three-room apartment in New York City; first, the model tenement required an expenditure of \$203 a year; second, the visitation of homes by agents of the Commission showed that a rental of \$17 a month was necessary to secure a decent apartment; and, third, the figures of the real estate agent showed that over \$200 was required if a new law tenement was to be managed on a commercially paying basis.

Housing Buffalo.

The conclusion reached after a careful investigation by one of the agents of the Commission seems to be that \$10 or \$11 a month will secure one of the five or six-room houses which have been described above. Ten dollars a month amounts to \$120 a year. Rent in Buffalo, therefore, is approximately 40 per cent cheaper than in New York; but it should be remembered that this \$120 does not include any allowance for heat. * * *

A Summary.

Putting together these data it appears that, in order to provide fairly decent housing accommodations, the annual allowance for rent in New York City must be at least \$200, in Buffalo at least \$120, and in other cities of the State something between the two. It is not safe, however, to venture conclusions for any cities which have not been specifically mentioned.

Fuel and Light.

In the study made by the Committee of the New York Conference of Charities and Corrections it was found that the families enjoying annual incomes of between eight and nine hundred dollars spent for fuel and light an average of \$41 per year. As these families were realizing an acceptable standard, \$41 a year would be enough to allow for this double purpose. This estimate receives confirmation in the practice of the New York Association for Improving the Condition of the Poor. That Association allows dependent families \$2 a month in the summer, \$3 in the fall and spring and \$4 in the winter, or approximately \$36 a year. However, if a family pay the rent of approximately \$200, which was considered necessary to secure a satisfactory tenement, the rent charge may include heat, as the model apartments are warmed by steam. So the allowance of \$41 can be decreased. Probably \$20 would suffice for the cooking and illumination in a steam-heated apartment; and, therefore, in the estimate for New York \$20 is considered the proper sum for fuel and light. For Buffalo, however, where the families live in detached houses, dwellings that would be more difficult to keep warm, the full \$40 has been allowed for this purpose. This corresponds very closely with the estimate of Mr. Howard in 1908, which was 6 per cent of \$675, or \$40.50.

Adding together the cost of food, rent, and fuel and light gives a total for food and shelter in New York of \$545 and in Buffalo of

\$441. These are the expenditures in which there is a variation from city to city. The other necessary outlays seem to be quite uniform all over the State. They will, therefore, be treated as if the problem were one for all the cities.

Clothing.

Difficult as it is to form an exact estimate of the sum required for rent, the task of determining the cost of adequate clothing is even more complex. A satisfactory standard wardrobe seems never to have been worked out. * * *

In this study a method was adopted which would partially eliminate the personal equation. From the family schedules were compiled very careful lists of the articles necessary in the wardrobes of individuals of both sexes at different ages. After these lists were completed the prices reported as actually paid for these goods were studied. The result was the series of clothing schedules which follows. It is not maintained that these lists prescribe the exact articles which should be purchased by any particular person. The schedules are offered merely as examples of a wise distribution of expenditures.

Before the lists are presented it would be well to mention a few of the general principles applied in their formulation. In the first place it was assumed that regular store prices, not bargain prices and not second-hand sale prices, should be used. This rule was adopted for a reason similar to that favoring its application when discussing the working girls. Although some can be accommodated by sales and by second-hand stores, the number of working families is so large that an adequate allowance for clothing must be based on original prices of first-hand goods. Another assumption was that the housewife would do a great deal of sewing, that she could make a good many of the garments for herself and for the children. So when a price is given, for instance, for the waists of a boy the sum refers to the cost of material which it is supposed the mother uses. Finally it was taken for granted that the stock of clothing should be such as to allow the members of the family to enjoy some social intercourse. The mother should have more than a shawl; she should be equipped with a coat in which to go out in the cold weather, either to church, to settlement club meetings, or to gatherings of her friends. Similarly the children should be able to maintain a respectable appearance at school. With this description of the method and principles involved in making the estimates the schedules may be submitted:

ESTIMATE OF THE COST OF CLOTHING FOR ONE YEAR FOR A MAN.

Hats	\$ 2.50
Overcoat one-fourth of \$15.....	3.75
Suit	15.00
Shoes 1½ pair \$3.50 and repairs.....	8.00
Socks	1.50
Underclothing	3.50
Shirts, 4 at \$1.....	4.00
Collars	1.50
Ties	1.00
Night shirts.....	.50
Rubbers .....	.75
Gloves	1.00
Umbrella	1.00
Overalls	1.50
Work shirts.....	1.50
Incidentals, suspenders, garters, handkerchiefs, etc.....	3.00
	<hr/>
	\$50.00

ESTIMATE OF COST OF CLOTHING FOR ONE YEAR FOR A WOMAN
IN THE HOME.

Hat	\$ 4.00
Coat, one-fourth of \$12.....	3.00
Skirt	4.00
Shirtwaists, 3 at 50 cents.....	1.50
Wash dresses.....	2.00
Underwear	2.50
Corsets	1.50
Corset covers.....	1.00
Petticoat .....	.50
Stockings	1.50
Shoes 1½ pair \$3.50 and repairs.....	8.00
Rubbers .....	.50
Umbrella	1.00
Gloves	1.00
Night dresses.....	1.00
Aprons .....	.50
Incidentals	5.00
	<hr/>
	\$33.50

ESTIMATE OF CLOTHING COSTS FOR ONE YEAR FOR BOYS.

	Age 13	Age 10	Age 4
Hats	\$ 1.00	\$ 1.00	\$ 0.50
Overcoats (annual proportion).....	2.50	2.00	1.00
Suits	10.00	4.00	4.00
Trousers (extra).....	2.00	1.00	.....
Waists .....	.50	.50	.50
Underwear	2.00	2.00	2.00
Ties .....	.50	.50	.....
Dress shirt.....	.50	.50	.....
Collars .....	.25	.25	.....
Night shirt.....	.50	.50	.50
Shoes	8.00	8.00	2.25
Stockings	1.00	1.50	.60
Mittens .....	.25	.25	.25
Incidentals	3.00	2.00	2.00
	\$32.00	\$24.00	\$13.60

ESTIMATE OF CLOTHING COSTS FOR ONE YEAR FOR GIRLS.

	Age 13	Age 10	Age 4
Hats	\$ 2.00	\$ 1.00	\$ 0.50
Coats	3.00	2.00	2.00
Dresses, wash.....	2.00	1.50	1.00
Dresses, wool.....	2.00	1.50	.....
Petticoats .....	.25	.25	.25
Underwear	2.50	1.70	1.50
Night dresses.....	.25	.25	.25
Ribbons .....	.....	.60	.....
Mittens .....	.25	.25	.25
Stockings	1.50	2.00	.60
Shoes	8.00	8.00	2.25
Incidentals	3.00	2.00	1.00
Total.....	\$24.75	\$21.05	\$ 9.60

* * * In summary, then, it can be said that, although the estimates submitted in this report are much higher than others, they are higher only because they include items really essential to welfare, which some investigators have disregarded, or because they make adequate allowance for such undurable articles as shoes and stockings. If the normal family which was assumed in the discussion of food and housing is clothed according to this scale, it will cost:

For the man.....	\$ 50.00
For the housewife.....	38.50
For the boy of ten.....	24.00
For the girl of eight.....	18.00
For the child of four.....	10.00
Total.....	\$140.50

This estimate of \$140 is \$45 more than that made by Professor Chapin in his compilation of the results of the investigation conducted under the auspices of the New York Conference of Charities and Corrections.¹ But Professor Chapin was sure an adequate supply of clothing could not be provided for less than \$95. On the other hand, he was by no means certain that \$95 would suffice. A curious coincidence is the fact that this estimate of \$140 for the expense of clothing a family is almost exactly equal to that made by Miss Caroline Goodyear, in 1906, when she declared that \$145 was necessary.

In view of these facts and comparisons it seems wholly within the bounds of reason to say that the minimum necessary clothing expenditure of a normal family is \$140.

Carfare.

If it is at all necessary for the man to ride to business, carfare will cost ten cents for each working day, or \$31.20 a year. A sum for this purpose should be included in the cost of living, as a very large majority of the working families that have been studied live so far from the places of employment that the man is unable to walk.

Insurance.

Another item in the budget which should be provided for is insurance. Of course the judgment of individuals as to what constitutes

¹ Chapin's figure is \$105, but it includes \$10 for washing.

adequate protection will differ, but a man who starts early enough can obtain a whole life policy at a rate of about \$20 a thousand. * * * At a minimum, however, the total provision for insurance will be \$35.60 a year. (In order to cover other members of the family.)

Health.

The families in the \$800 income group studied by the New York Committee spent on an average \$22 a year for health. This item is so problematical that it is impossible to state what should be the minimum allowance. As these families seemed to be adequately provided for in every way, \$22 has been here adopted as a reasonable allowance for the care of health. * * *

Furnishings.

Every year it is necessary for the ordinary family to replace worn-out furniture, or cooking utensils, or linen, or dishes; to buy mops and brooms and pails; and to provide other furnishings. Here again it is impossible to make a precise estimate of the minimum sum required, but it is submitted that the sum allowed in New York City by the Committee of the State Conference of Charities and Corrections, namely, \$7 a year, is none too much for this purpose. As there is no better figure available, this amount has been adopted for the purposes of this report.

Education.

Schools, school books and, generally, libraries are free in New York State. It may, then, seem questionable whether any allowance should be made for education. The question, however, should be quickly dispelled when it is stated that newspapers and periodicals are universally classed by students of social conditions as objects of educational expenditures. If a newspaper be bought every day, the annual cost would be about \$5.63. This sum is considered a minimum necessary outlay for education. Any other expenditures, such as those for pads or pencils that the children may incur, might be taken from the incidental item to which reference will later be made.

Recreation and Amusement.

The interviews of the agents of the Commission with women throughout the State show a dearth of amusement in the families. Most of those who were on the line between self-dependence and

poverty had such difficulty making both ends meet that very little remained for the cultivation of taste and for expenditure on pure enjoyment. Many women spend their leisure sitting on the steps of their tenement gossiping; some lean out of the windows with a pillow to keep their elbows from being scraped by the stone sills; others take walks to the parks; some occasionally visit relatives or friends; and there is, once in a while, a dinner party; but, on the whole, except for the men, there is little conscious recreation. Now, amusement is a necessity in a normal life. The joyless life can hardly be said to be receiving as much as is sacrificed in maintaining a bare existence. Amusement is imperative, also, in order that efficiency may be realized, for it is only a mind freshened by social contact or by diversion from cares, that is in fit condition to cope with the problems of industry, or to meet the crises which frequently come in managing children. For these reasons it has been deemed wise to include as part of the minimum cost of living for a normal family an allowance of \$50 for recreation and amusement. This is less than \$1 per week or less than twenty cents per person per week, really a very small sum.

Miscellaneous.

Under the head of miscellaneous expenditures are included outlays for such things as tobacco, carfare while shopping, purchase of toys for the children, toilet articles, hair cuts for the men, washing and laundry, tools, moving, and the spending money of various members of the family. The allowance for miscellaneous expenditures in the budget which satisfied the New York Conference of Charities and Corrections Committee was \$40 per year. This has been incorporated as part of the present estimate.

Summary.

Summing up then, the estimate for the cost of living is as follows:

ESTIMATE OF COST OF LIVING FOR NORMAL FAMILY.
THREE UNITS.

	New York.	Buffalo.
1. Food	\$325.00	\$281.00
2. Rent	200.00	120.00
3. Fuel and light.	20.00	40.00
4. Clothing	140.00	140.00
5. Carfare	31.20	31.20
6. Insurance: Man	20.00	20.00
Family	15.60	15.60
7. Health	22.00	22.00
8. Furnishing	7.00	7.00
9. Education, newspaper	5.63	5.63
10. Recreation and amusement.	50.00	50.00
11. Miscellaneous	40.00	40.00
Total.	\$876.43	\$772.43
Average per week.	16.85	14.85

* * * Attention should be called to some of the limitations of this estimate. In the first place, if the family is larger than 3.3 consuming units; that is, if it has more children or older children than the assumed type, the sum set will not suffice. On the other hand, if the family is smaller it can maintain itself on less. The standard was selected with a view of obtaining a family as nearly typical as possible. In the second place it should be noted that no attention has been paid to the nationality of the family. It was assumed that an "American standard" is to be realized, and that what a foreign born family can subsist on is not particularly vital to persons studying the cost of living for a community which should be assimilated if it is not already American. Third, it must be emphasized that the fixing of the minimum cost of living in New York City at \$876 a year, or approximately \$16.85 a week, is not an estimate of a living wage. A living wage must be higher in order to contain an allowance for unemployment. This estimate means that fifty-two times \$16.85 is annually necessary to furnish a decent living to the typical family. And finally, it should be said that no allowance was made in this estimate for savings. Savings are an absolute necessity to a family. It was shown in the first part of this report that to a working woman thrift is essential as a provision for the probable contingencies of misfortune. Now, the larger the

number of people involved the greater is the probability of misfortune, and therefore the greater is the desirability of saving. If the wage-earner is thrown out of employment, the suffering entailed by this misfortune is multiplied by the number of people dependent upon him. For these two reasons—first the greater chance of misfortune, and, second, the greater burden of misfortune when it comes—it is absolutely imperative that the living wage should contain an allowance for savings.

XVI

FAMILY BUDGETS IN CHICAGO STOCKYARDS DISTRICT, 1914

From Wages and Family Budgets in the Chicago Stockyards District, by J. C. Kennedy and others, an investigation carried on under the direction of the Board of the University of Chicago Settlement, Chicago. The University of Chicago Press, 1914.

First in importance for a knowledge of working and living conditions in the stockyards district is an investigation of actual standards of living. * * *

In order to answer the above and other questions, we have gathered family budgets from 184 typical stockyards families. This number would be insufficient to furnish the basis for conclusions regarding the standards of living in Chicago or in any other large city. We believe, however, that the number is adequate to represent conditions in the particular district with which we are concerned in this study. * * *

* * * Nine-tenths of the people living in this district are of foreign birth or parentage, the Polish and Lithuanian colonies being especially large. In gathering our budgets we have taken this fact into consideration, and have chosen our families in about the same relative proportions as the prevailing nationalities. * * * Our Polish families in particular are representative of the most successful Poles in the district rather than the average—as is shown by the fact that one-third of them own their homes (generally subject to heavy mortgages, to be sure). It must be recognized at the outset, therefore, that, while the families chosen are genuine working-class families, yet they are a selected group, with a standard of living somewhat above the average in the stockyards district. * * *

Each family which agreed to keep an account was furnished with a substantial notebook about four by seven inches in size to which was tied a lead pencil. There was no special rulings in these notebooks, and the family was requested to write down each day every purchase and item of expenditure. * * *

Over 75 per cent of all the accounts were kept for periods of six months or more. * * *

Perhaps the most important question to be answered by our study of family budgets is the minimum amount necessary to support a family of five, or any other size family, decently in the stockyards district. First of all, it may be well to state what the families of

five actually spent. Then by an analysis of their expenditures we may be able to ascertain what such a family would need to spend in order to live efficiently. * * *

Altogether, there were 34 families of five members having an average income of \$801.49, with an average expenditure of \$748.88. Eight of the families had deficits averaging \$47.25. In practically every case where the family income went below \$600 there was a deficit. *This does not mean, however, that a family of five can live on \$600 a year.* They may exist on that amount for a time, but they cannot live on it. The least misfortune will plunge them into debt, and sooner or later they will become dependent on charity.

We submit below a list of expenditures based on analysis of the family accounts which we collected, which we believe constitutes the minimum below which a family cannot go for any length of time in the stockyards district without lowering its vitality and cutting off the possibilities of future development.

Rent	\$120.00	— \$10 per month for 4 sanitary rooms.
Heat and light.....	36.00	— An average of \$3 per month.
Bread and baked goods.....	72.00	— 20 cents per day.
Butter	20.28	— 1½ lbs. per week, at 26 cents per lb.
Lard	3.90	— ½ lb. per week, at 15 cents per lb.
Cheese	10.40	— 1 lb. per week, at 20 cents per lb.
Eggs	19.50	— 1½ doz. per week, at 25 cents per doz.
Milk	43.80	— 1½ qts. per day, at 8 cents per qt.
Sugar	9.18	— 3 lbs. per week, at 6 cents per lb.
Meat	87.60	— 1½ lbs. per day, at 16 cents per lb.
Fish	11.96	— 1½ lbs. per week, at 15 cents per lb.
Vegetables	36.50	— 10 cents per day.
Fruits	26.00	— 50 cents per week.
Cereals	7.80	— 15 cents per week.
Pickles, peppers, spices, etc...	5.20	— 10 cents per week.
Coffee, tea, etc.....	13.00	— 25 cents per week.
<hr/>		
	\$523.12	— Total for rent, heat and foodstuffs.
<hr/>		
Clothing, father.....	\$ 30.00	— 1 suit clothes, working-clothes, shirts, underwear, shoes and sundries.
Clothing, mother.....	30.00	— {Includes dresses, coats, winter garments, shoes, hats, etc.
Clothing, children.....	40.00	
Carfare	10.40	— 20 cents per week.
Education	15.00	— Includes children's books and newspapers.
Laundry	5.20	— 10 cents per week.
Soaps, starch, etc.....	13.00	— 25 cents per week.
Furniture and furnishings.....	22.00	— Includes household utensils, brooms, etc.
Insurance	24.50	— Husband, 15 cents weekly; wife and 3 children, each 5 cents per week.
Health	10.00	— Includes all doctors' bills and medicines.
Societies and trade unions.....	10.40	— 20 cents per week.
<hr/>		
	\$210.50	
	523.12	
	<hr/>	
	\$733.62	

The above list includes no expenditures for church, which are made by at least nine-tenths of the families in this district; no expenditures for alcoholic liquors, which were made by all but one of the families studied; no expenditures for tobacco, barber bills, recreation, Christmas presents, ice-cream and candy, and a number of other items which are found in the budget of every family in this district that can afford it. Moreover, no allowance is made for the extraordinary expenses occasioned by birth, deaths, moving, etc., which must be met sooner or later by every family. *If we allow \$66.38 per year to cover all these items, the necessary minimum expenditure for each family of five would be \$800.* We believe that no family of five can live decently and efficiently in the stockyards district on less than this amount.

It will be noted that rather liberal amounts were allowed in our list for milk, cheese and eggs. On the other hand, the allowance for meat was put at a much lower figure than the amounts now spent by the average family in the district. We believe that more nutriment can be obtained by spending the money in this way than otherwise. However, even with the most intelligent expenditure of money and the most economical management of the household, it would be impossible for a family of five to live on less than \$800 a year.

XVII

STANDARD OF LIVING IN NEW YORK CITY, 1907, BY R. C. CHAPIN

From The Standard of Living Among Workingmen's Families in New York City, by Robert Coit Chapin, New York, Charities Publication Committee, 1909.

Families Covered.

The number of schedules received from Greater New York was 642. * * * Of these, 251 were rejected, so that there remained, accordingly reports from 391 families, each consisting of 4, 5 or 6 persons. The number of persons in the standard family being assumed as five, families containing one more and one less than this number were included as being fairly comparable with families of five persons in mass grouping where excess and deficiency would tend to offset one another. * * *

Conclusion.

It seems safe to conclude from all the data that we have been considering that an income under \$800 is not enough to permit the maintenance of a normal standard. A survey of the detail of expenditure for each item in the budget shows some manifest deficiency for almost every family in the \$600 and \$700 groups. The housing average shows scarcely more than three rooms for five persons. Three-fifths of the families have less than four rooms, and more than one and one-half persons to a room. Fuel is gathered on the street by half of the \$600 families and by more than one-third of the \$700 families. One-third of the \$600 families are not able to afford gas. One-third of the \$600 families are within the 22-cent minimum limit for food, and 30 per cent of the \$700 families spend 22 cents or under. In the same way the average expenditure for clothing in neither of these groups reaches \$100, and 30 per cent of the families are in receipt of gifts to eke out the supplies of clothing. In sickness the dispensary is the main dependency of these families, each of whom spends less than \$10 annually in the average, on account of health, and only one family in ten in the \$600 group and one in six

of the \$700 group spends anything for the care of the teeth. The returns as to the furnishing of the houses show that in the \$600 and \$700 groups adequate furnishing is scarcely attained as the rule, and it is difficult to see how it could be kept up with the average expenditure reported for this purpose. In regard to membership in organizations, such as labor unions and churches, \$1100 does not permit generous co-operation, and the families in the lower income groups are seen to be represented in smaller proportion in these organizations than are the families in higher income groups. Recreation and education are reduced to their lowest terms, save in so far as they may be had without expense. Items included under the head of miscellaneous expenditures represent, to a certain extent, the modest comforts above physical necessities, and the average of \$25 or \$30 puts a pretty narrow limit to what may be enjoyed in this category. As to provision for the future, industrial or burial insurance is one of the necessities that the poorest families provide, and the returns show cases where something is saved out of a \$700 income, but the savings are at the expense of essentials of the present, as is seen in the number of underfed families reporting a surplus at the end of the year.

On the other hand, an income of \$900 or over probably permits the maintenance of a normal standard, at least so far as the physical man is concerned.

An examination of the items of the budget shows that the families having from \$900 to \$1,000 a year are able, in general, to get food enough to keep soul and body together, and clothing and shelter enough to meet the most urgent demands of decency. Sixty-eight per cent of the \$900 families have four rooms or more, the average number of rooms being 3.75. The average expenditure for fuel allows comfortable provision; one-quarter of the families report gathering wood on the streets. Only 1 family in 6, in Manhattan 1 in 15, is without gas. The average expenditure for food is a trifle over \$400, enough to provide adequate nourishment, and only 5 families out of 63, or 1 in 12, report less than the minimum of 22 cents per man per day. As to clothing, gifts are reported still in one-fourth of the cases, but the average amount expended is between \$130 and \$140, and 3 families out of every 4 spend more than \$100. Dispensaries and free hospitals are not for the \$900 and \$1,000 families, the main dependence in cases of illness. The expenditures for furniture indicate that the existing outfit is fairly well maintained, and the equipment as it stands is reported fairly comfortable in the case of three-fourths of the \$900 families and of seven-

eighths in the \$1,000 group. Participation in the benefits of labor unions or religious and fraternal organizations becomes possible to the majority of the families, and some margin is available for the pursuit of amusements and recreation, the purchase of books and papers and the indulgence of personal tastes outside of the indispensable necessities of existence.

Whether an income between \$800 and \$900 can be made to suffice is a question to which our data do not warrant a dogmatic answer. In some respects the \$800 families make no better showing than those with incomes of between \$700 and \$800; for instance, in regard to insurance, free fuel and kerosene. Even as to food there is a large percentage of underfed families in this group, and the average expenditure is only \$25 above that of the income-group below. In regard to housing, distinctly better conditions prevail and the limit of the tolerable is perhaps reached by half of the families in this group. In regard to clothing also, conditions are better than with the \$700 families, but in view of the fact that one-third of the 73 \$800 families spend less than \$100 for clothing, it seems an open question whether a normal standard is maintained in the group as a whole. The same query arises regarding expenditures for social obligations, amusements and miscellaneous purposes. It is important to notice that in this income group the cases of families below our assumed standards for food, clothing and housing are largely in the second (South European) group of nationalities. Anticipating the paragraph which follows, it seems probable that on \$800 to \$900 the standards prevailing among Bohemians, Russians, Austrians and Italians may be maintained, but that it is the exception rather than the rule when the more expensive standards of the Americans and kindred nationalities are maintained on this amount. * * *

In summary, therefore, the results of our investigation indicate that, while the personal factor does operate in the case of every family, both as regards the habits of the father and the managing ability of the mother, the limits within which it may affect the actual sum total of material comforts that make up the living of the family are set by social forces. These social forces find expression, on the one side, in the income which the family receives—that is, in the rate of wages received by the father and others who are at work; on the other side, they are expressed in the prices that have to be paid to get housing, food and the other means of subsistence. The actual standard that prevails is set primarily, therefore, by the wages paid and the prices charged. Into the discussion

of the causes that underlie these phenomena it is no part of our task to enter. This investigation has aimed only to show wherein the actual content of the standard (what things, and how many, are had) varies as the two jaws of the vise, wages and prices, contract and relax; and to show how the possibilities of human well-being are modified in consequence of the movement of the external forces that set the economic limits of the standard of living.

Relation of Income to Under-feeding, Etc.

FAMILIES UNDERFED, UNDERCLOTHED AND OVERCROWDED. NUMBER AND PERCENTAGES—BY INCOME.

Income.	\$400 to \$599	\$600 to \$799	\$800 to \$899	\$900 to \$1099	\$1100 and over.
Number of families.....	25	151	73	94	48
Underfed:					
Number	19	48	16	8	..
Per cent	76	32	22	9	..
Underclothed:					
Number	22	86	23	17	3
Per cent	88	57	32	18	6
Overcrowded:					
Number	17	87	39	34	10
Per cent	68	58	53	36	21
Underfed and underclothed:					
Number	17	24	7	2	..
Per cent	68	16	10	2	..
Underfed and overcrowded:					
Number	13	29	11	5	..
Per cent	52	19	15	5	..
Underclothed & overcrowded:					
Number	13	56	18	7	..
Per cent	52	37	25	7	..

XVIII

WAGE-EARNERS' BUDGETS IN NEW YORK CITY, 1906, BY L. B. MORE

From Wage-earners' budgets; a study of standards and cost of living in New York City, by Louise Bolard More, with a preface by Franklin H. Giddings, Professor of Sociology in Columbia University, New York. Holt & Co., 1907.

In the present study the *two hundred families* finally chosen were sorted out by a method as sound as could possibly be discovered, and having the great merit that whatever coefficient of error it introduces is obviously an error of understatement. The two hundred families making up the final list were those that proved to be able and willing to co-operate with the investigator intelligently and patiently in *keeping simple accounts* and in making careful, verifiable statements. * * *

Though the average income and expenditures of two hundred families so different in their social and industrial condition do not give authoritative results for any one class or for the working people as a whole, yet the total averages are interesting. The average income for the two hundred families was \$851.38. The average size of family was 5.6. The average expenditures for different purposes were:

		Per cent of total expenditure.
Food	\$363.42	43.4
Rent	162.26	19.4
Clothing	88.45	10.6
Light and fuel	42.46	5.1
Insurance	32.35	3.9
Sundries	147.31	17.6
Total	\$836.25	100.0
Average surplus	\$ 15.13	

The writer believes this to be a representative allowance for a typical independent and industrious workingman's family in a city neighborhood. * * *

This investigation has shown that a well-nourished family of five in a city neighborhood needed at least \$6 a week for food. The average for 39 families, having five in the family, was \$327.24 a year for food. If we consider \$6 a week (or \$312 a year) as 43.4 per cent of the total expenditure (which was the average percentage expended for food in these 200 families, and very near the average for the workingmen's families in the extensive investigation of the Department of Labor), the total expenditures would be about \$720 a year. It therefore seems a conservative conclusion to draw from this study that a "fair living wage" for a workingman's family of average size in New York City should be at least \$728 a year, or a steady income of \$14 a week. Making allowance for a larger proportion of surplus than was found in these families, which is necessary to provide adequately for the future, the income should be somewhat larger than this—this is, from \$800 to \$900 a year.

XIX

SUGGESTED BUDGET FOR A TEXTILE-MILL WORKER'S FAMILY, PHILADELPHIA, 1914

The following budget for a family of five is contained in a study entitled "Budgets of Families and Individuals of Kensington, Philadelphia," by Esther Louise Little, A.M., and William Joseph Henry Cotton, A.M., University of Pennsylvania Studies, published by the New Era Printing Co., Lancaster, Pa. The first table shows the cost of the budget at the time of the original study in 1913-1914. The second table (from Appendix C of the Study) shows the cost at prices prevailing in 1918 and 1919.

Determination of a Fair Standard.

Whether a standard of living may be considered fair or not depends, to a great extent, upon the customs and aims of the persons to whom it is applied. In the present attempt to determine what is a fair standard for a Kensington mill worker's family, the various items that enter into the actual budgets of families of the district have been taken into consideration, and an effort has been made to include in the standard, for the most part, only those things which the majority of Kensington mill workers' families are striving to attain, and which they consider essential to a fair standard of living. The purpose has not been to impose upon these families an ideal standard. In the case of but two items of the budget, namely, insurance and savings, has a departure been made from the rule of basing the suggested budget upon the actual budgets of Kensington families. Under the heading which covers these two items the investigators have advocated what they regard, for a workingman's family, as the wisest method of accumulating a savings fund, and of protecting the family income, at the same time.

* * *

RENT.

An expenditure of \$15 per month for rent in Kensington enables¹ a family to live in a seven-room, two-story, brick house with modern conveniences, including a bath. Three of the rooms may be used for

¹Throughout the discussion of this suggested budget, the present tense has reference to the years 1913 and 1914.

sleeping purposes. An allowance of \$15 per month, or \$180 per year, is therefore suggested for rent for a fair standard budget for a Kensington mill worker's family consisting of five members.

FUEL AND LIGHT.

An expenditure of \$2 per month for the three summer months, and an average of \$5 per month for the remaining nine months of the year, will probably provide sufficient fuel and light for a family of two adults and three children in the Kensington district. An allowance of \$51 per year is therefore suggested as a fair amount for this heading.

Food.

In order to determine upon an amount that might be considered a fair allowance for food, it was necessary to ascertain the cost of some dietary which contains all of the food elements needed by the body, in their proper proportions. Following is a list of articles, with retail prices thereof, in a dietary plan for a family of two adults and three children, for one week, prescribed by the Department of Health of the City of New York in a bulletin of May 5, 1916, the articles embraced in the list having been "selected with great care, so as to provide a well-balanced diet at a very low cost":

ONE WEEK'S FOOD SUPPLY FOR A FAMILY OF FIVE.

1 lb. butter	\$.42
1 bag sugar (3½ pounds) . . . . .	.24
1 lb. rice . . . . .	.08
1 lb. dried peas . . . . .	.09
1 lb. beans . . . . .	.09
1 lb. farina . . . . .	.06
1 lb. oatmeal . . . . .	.05
1 box cocoa (¼ pound) . . . . .	.10
1 lb. prunes . . . . .	.15
1 lb. onions . . . . .	.04
6 lbs. potatoes . . . . .	.22
1 head cabbage (medium size) . . . . .	.05
1 lb. cheese . . . . .	.23
2 doz. eggs . . . . .	.60
2 lbs. of meat daily at 20 cents lb.	2.80
2 loaves of bread daily at 8 c cents each	1.12
2 qts. of milk daily at 7 cents . . . . .	.93
Total	\$7.31

For babies and young children, use only Grade A milk. This costs 9 cents a quart. In summer, fresh fruit should be used instead of prunes.

CLOTHING.

The amounts allowed in the Government report for a fair standard of clothing for the different members of a Fall River mill worker's family¹ may be adopted for a Kensington mill worker's family, provided the allowance of \$33.75 for the mother and that of \$25.35 for a 10-year-old daughter be increased to \$50 and \$30, respectively. The amounts allowed for clothing in the present suggested budget will then be as follows: Father, \$45.75; mother, \$50; daughter, 10 years old, \$30; son, 6 years old, \$17.45; son, 4 years old, \$14.50; total, \$157.70.

MEDICAL ATTENTION.

A fair standard budget must allow for medical attention, which here covers dental and optical as well as medical services, and the filling of prescriptions. Since the amount needed for these items necessarily varies in different families for any one year, and in the same family for different years, it is impossible to set a figure for this heading that will meet the requirements in all cases. As a rule, the adult members of the textile-mill workers' families of Kensington belong to lodges, the dues for which entitle the members to sick benefits, and also to the services of the lodge physicians. Inasmuch, therefore, as provision is made in this suggested budget for lodge membership for the father and the mother, the contingency of prolonged illness on the part of either of them is met, to some extent, by this provision. Lodge assistance will, however, not be available in the event of illness on the part of the children. An expenditure of \$27 will, perhaps, when the privileges that go with lodge membership are taken into consideration, cover, in an average year, the cost of dental, optical and medical services, and the filling of prescriptions, for a family of five, whose members are ordinarily in good health. A yearly allowance of \$27, therefore, while it will by no means cover all emergencies, is suggested as a fair amount for this heading.

INSURANCE AND SAVINGS.

* * * Because of its many advantageous features, it appears to the investigators that, as a rule, a long-term endowment life insurance policy offers the wisest method of saving, for a working-man with dependents, at the same time that it guarantees a continu-

¹ 61st Congress, 2d Session, Senate Document No. 645, Vol. XVI, op. cit., pp. 239, 240, 243. See also Appendix A of this study.

ation of income in the event of his premature death. An allowance of \$100 per year is suggested to cover insurance and savings, in a fair standard budget for a family of five in the Kensington mill district, and it is advocated that this entire amount be used to purchase a long-term endowment policy from a company of good standing. The preceding discussion shows that this amount will buy a 30-year endowment policy of something around \$3,000 if taken out at age 35. * * *

LODGE AND UNION DUES.

Since it is customary for the adult members of the textile-mill workers' families of Kensington to belong to lodges, provision should be made, in a fair standard budget, for lodge membership for the father and the mother. * * *

READING MATTER.

A fair standard budget should allow for a week day and a Sunday newspaper, and for a book or a magazine now and then. There should also be provision for postage and stationery, and for occasional telephone calls, all of which items are here included under the heading Reading Matter. No provision needs to be made out of the family income for school books, since these are furnished by the city to pupils attending the public schools. An allowance of \$10 per year is suggested as a fair amount for this heading for a Kensington mill worker's family consisting of two adults and three children.

CHURCH AND CHARITY.

* * * An allowance of 10 cents per week for each adult member of the family for church and of 2 cents per week for each child for Bible school, or a total yearly allowance of \$13.52, is suggested for this heading for a fair standard budget for a Kensington mill worker's family consisting of two adults and three children.

FURNITURE, FURNISHINGS AND GENERAL SUPPLIES.

Provision must be made for furniture, furnishings and general supplies. Besides the occasional expense of articles of furniture, and of such furnishings as bedding, cooking utensils and dishes, there is the more frequent expense of such general supplies as brooms, scrubbing brushes and soap for laundry, kitchen and toilet purposes. An allowance of \$30 per year is suggested as a fair amount for this heading.

RECREATION AND POCKET MONEY.

* * * A fair standard budget may allow 25 cents per week for the father for tobacco, but nothing for liquor. An additional allowance of 25 cents per week for each of the adults, and of 10 cents per week for each of the children, may be granted for recreation, making a total yearly allowance of \$54.60 for recreation and "pocket money" in the case of a family of two adults and three children.

UNCLASSIFIED.

A budget that is to be considered fair by the majority of Kensington mill workers' families should make some provision for outside laundry, for occasional carfare (though not for regular carfare to and from work, since, as a rule, a Kensington mill worker may secure a suitable home near his place of employment), for gifts to friends or to relatives who are not of the immediate family and for a small contingent fund. An allowance of \$40 per year is suggested to cover these items in a fair standard budget for a Kensington mill worker's family consisting of two adults and three children.

A SUGGESTED BUDGET, FAIR STANDARD, FOR A TEXTILE-MILL WORKER'S FAMILY OF FIVE, CONSISTING OF A FATHER, A MOTHER, A GIRL OF 10, A BOY OF 6, AND A BOY OF 4, FOR ONE YEAR, 1913 OR 1914.

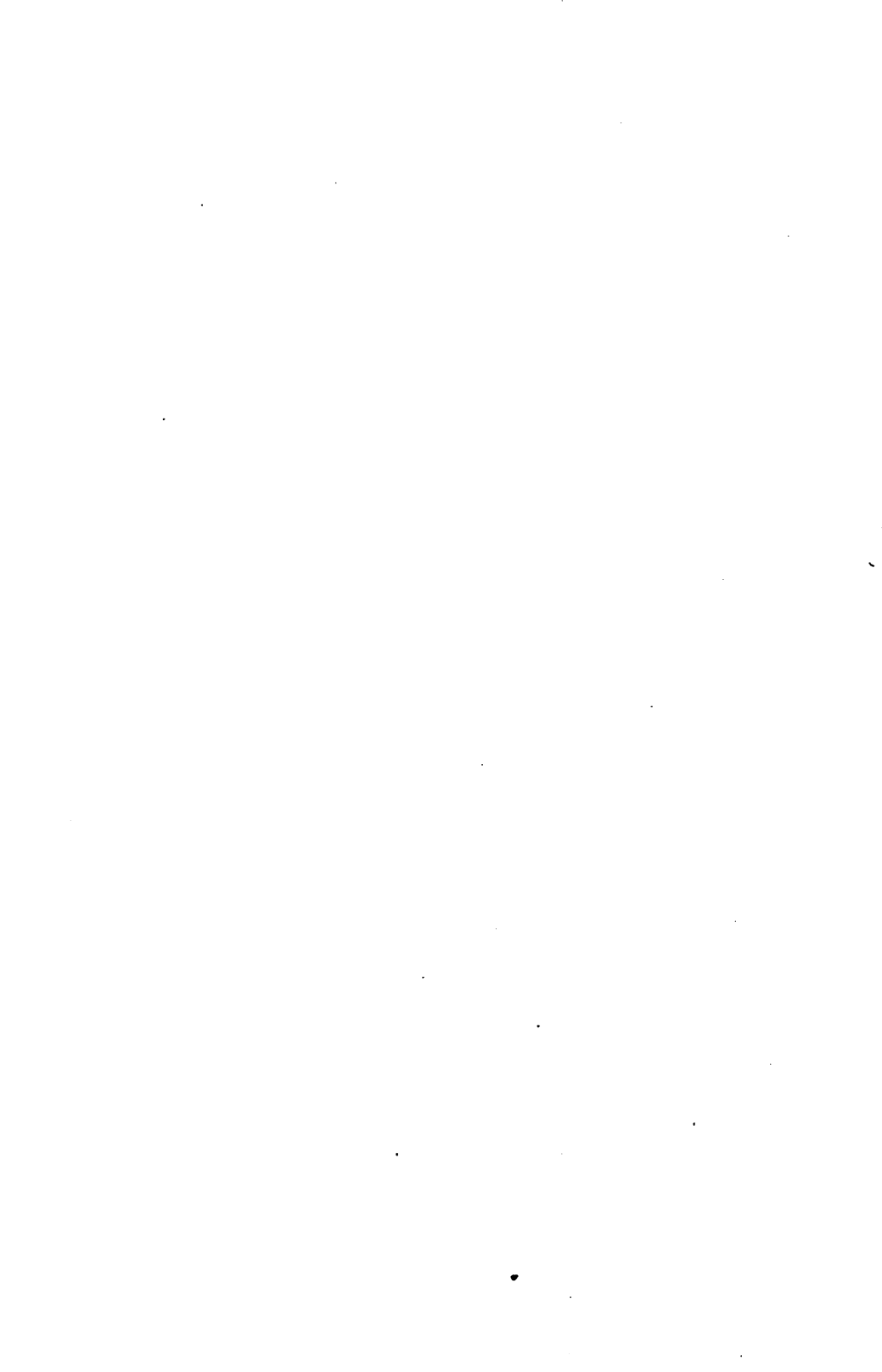
Item.	Amount.	Per cent.
Rent	\$180.00	16.82
Fuel and light	51.00	4.77
Food	380.12	35.53
Clothing	157.70	14.74
Medical attention	27.00	2.52
Insurance and savings	100.00	9.35
Lodge and union dues	26.00	2.43
Reading-matter	10.00	.93
Church and charity	13.52	1.26
Furniture, furnishings and general supplies	30.00	2.80
Recreation and pocket money	54.60	5.10
Unclassified	40.00	3.74
Total	\$1,069.94	100.00

TABLE GIVING THE AMOUNTS IN A SUGGESTED BUDGET, FAIR STANDARD, FOR A TEXTILE-MILL WORKER'S FAMILY OF FIVE, REVISED BY THE USE OF INDEX NUMBERS TO CONFORM TO THE SCALE OF PRICES FOR MARCH, 1918, AND MARCH, 1919.

Item	Amount ¹ for 1914	Index number for March 1918 (March 1914 100)	Revised Amount ¹ for March 1918	Index number for March 1919 (March 1914 100)	Revised Amount ¹ for March, 1919
Rent	\$ 180.00	1.15	\$ 207.00	1.15	\$ 207.00
Fuel and light.....	51.00	1.26	64.00	1.48	75.00
Food	380.00	1.54	585.00	1.75	665.00
Clothing	158.00	2.00	316.00	2.00	316.00
Total for the four principal items of expenditure	\$ 769.00		\$1,172.00		\$1,263.00
Medical attention.....	\$ 27.00	1.52	\$ 41.00	1.64	\$ 44.00
Insurance and savings.....	100.00	1.52	152.00	1.64	164.00
Lodge and union dues.....	26.00	1.52	40.00	1.64	43.00
Reading matter.....	10.00	1.52	15.00	1.64	16.00
Church and charity.....	14.00	1.52	21.00	1.64	23.00
Furniture, furnishings and general supplies.....	30.00	1.52	46.00	1.64	49.00
Recreation & pocket money	55.00	1.00 ²	55.00	1.00 ²	55.00
Unclassified	40.00	1.52	61.00	1.64	66.00
Total.....	\$1,071.00		\$1,603.00		\$1,723.00

¹These amounts are stated to the nearest dollar.

²Carfare and the price of moving pictures and of other cheap standard forms of amusement cannot be said to have increased.







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